

# MASSACHUSETTS PLOUGHMAN



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## AGRICULTURAL.

### Winter Dairying.

It used to be said that winter dairying was much more expensive than summer than extra profits obtained from it hardly paid. This impression was due as much to our general ignorance of how to adapt ourselves to the new industry as to anything else. The fact is we can distribute our work over the winter by a little planning so that it need not be any more expensive. As it is now we devote all of our time to summer dairying, and then when winter comes on we have little to do. The crowded condition of farm work in summer is often a worry to the farmer, and it is also responsible for much waste and loss. During the rush season higher farm wages must be paid, and often enough the products cannot be marketed or harvested in time to get the best results. Now, by taking up winter dairying systematically we redistribute this whole work, and devote most of our time to securing good crops for the animals to live on when giving us the most in return.

One of the weakest points of dairymen in the past has been that of raising adequate crops for their animals. The shiftless ones would have indifferent pasture for them in the early spring and summer, during which time they would manage to get the heaviest and driest yield of milk. In the fall and winter the animals would have to worry and starve along on cornstalks or other poor fodder. Those who were more progressive would provide some soiling crop for late fall feeding, and would lay in a fair amount of seed hay. But this system even was only a poor makeshift. It was not until the able came into general use that we could see our way to furnish the cows with something like a decent, succulent food. Now with the ensilage, good soiling, winter roots, good hay and coarse fodder, we can winter our best milch cows almost as successfully as in summer. They get not only a variety of food, but rich, succulent, milk making rations. They thrive on this food, and with proper care yield nearly as much milk as in summer.

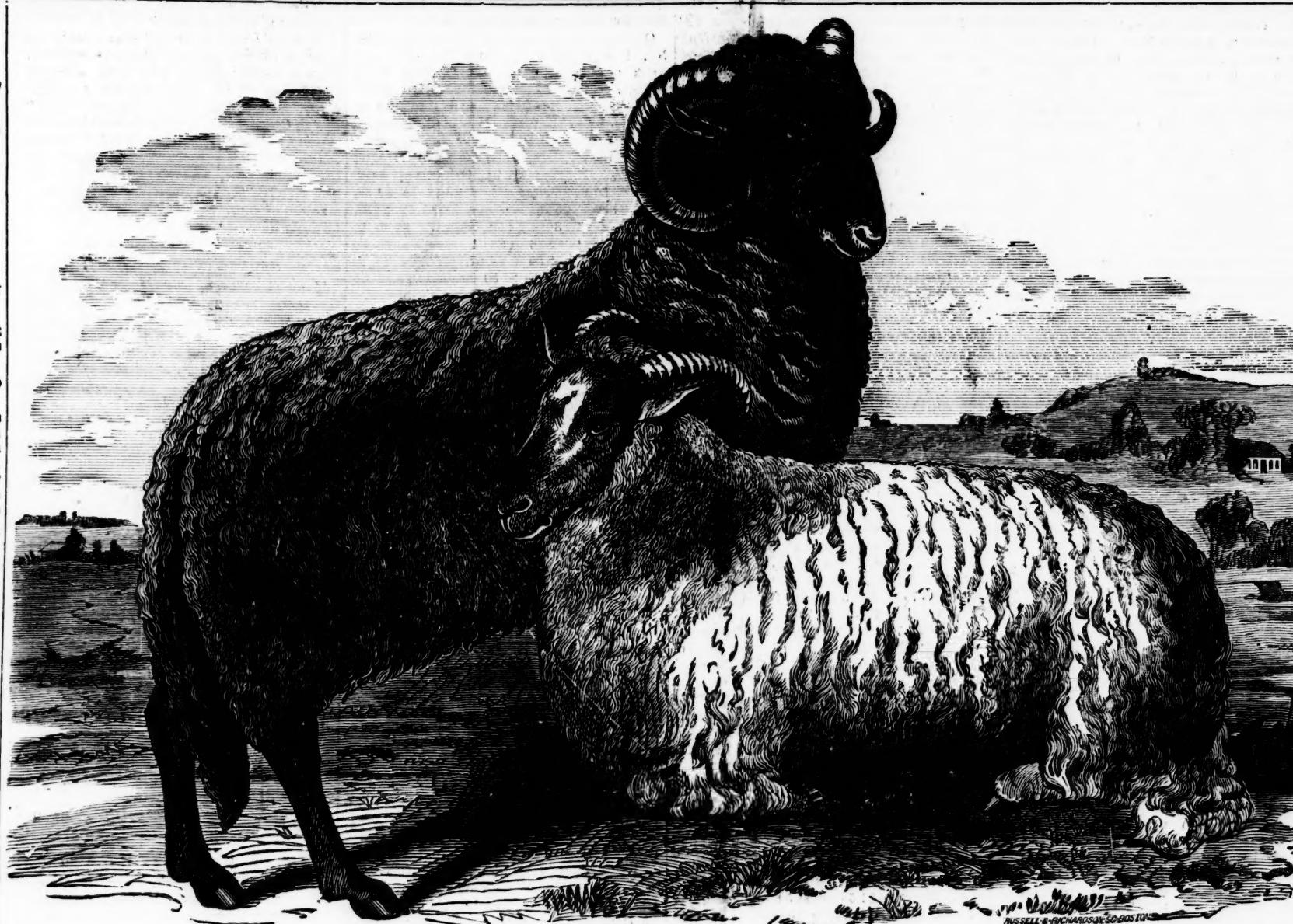
Winter dairying thus consists of the proper distribution of our farm work over the whole year. In the summer our time and attention must be given chiefly to the growing of good crops for winter feeding. Pastures will supply the cows with their summer food, and all the heavy, cultivated crops can then be garnered for winter feeding. This work costs no more than the old method of raising crops for summer feeding, and letting the animals half starve through the long winter.

W. E. EDWARDS.

### Work and Wages in Siam.

Those who are interested in the comparative values of wages and cost of living, and there are not many who are not, may like to study the report of Consul General King at Bangkok, Siam. He says the wages of engineers, pitters, blacksmiths and boiler makers are \$2 to 75 cents a day in gold, carpenters, cabinet makers and bricklayers \$1 to 40 cents, tailors for gentlemen and ladies \$0.50 cents, laborers 15 to 30 cents, at a farm hand \$12 to \$13 per season and found. They are unusually high just now because the King of Siam is conversing a large tract of jungle back into a royal park, and building palaces, houses, cottages and conservatories, which employs much extra labor.

We might expect the prices of food to be correspondingly low, but gives the following as price, also in gold: Butter 30 to 45 cents a pound; lard 25 to 32½ cents; flour 7½ to 11 cents; rice 13 to 45 cents; coffee 28 to 32½ cents; ham and bacon 23 to 45 cents; mutton 25 cents; peacock 40 cents; sugar 6 to 8½ cents; turkeys \$2 to \$5 each; roses \$1.50 each; duck 20 to 30 cents each; chickens 15 to 30 cents each; eggs 12 to 18 cents a dozen; canned salmon 30 to 30 cents per can. He says they live in houses of one room, about 10 feet square, sit upon the floor, sleep upon grass mats, cook in a box of earth in an earthenware crock, and the whole family eat their rice, fish and vegetables out of the same dish, without knife, fork or spoon. They have sometimes a few eggs, and on rare occasions chickens, but other meats are but seldom used by the laboring classes,



SPANISH MERINO.

excepting the Chinese, who form the larger part of the mechanics, use considerable of the native pork. Furniture costs for a chair \$9 cents to \$3, bedstead \$9 to \$15, mattress \$4.50 to \$9, dining table \$6 to \$10, but most of them have no use for such luxuries, and but little for clothing excepting a cloth around the loins, and for women another around the breast. No shoes are worn, and very seldom a covering for the head. There seems to be in this but little to tempt the workman from the United States to emigrate to that country, yet few from there ever come to this country.

### Frost in Orange Groves.

Uneasy lies the head that rules an orange or a lemon grove in southern California these midwinter days, for no one knows when Jack Frost may skulk down from the snow-clad peaks of the Sierras and leave damaged citrus trees and ruined crops in the hoary wake of his flight through the valleys and along the foothills. To be sure, the present season is as sunny, balmy and fragrant as any winter ever was, also, there never has been a disastrous visit of Jack Frost in this region, yet no one can tell what Jack Frost in this region, yet no one can tell what the night the dread old fellow may take it into his head to drop down from the mountains even for a few hours. Until some invention is made towards safe frost protection in citrus-growing regions, there will always be some uneasiness among the growers from the beginning of winter until the fruit crop is picked, packed and on the way to market.

Conservative estimates of the quantity of oranges now on the trees and hastening to fruition in southern California are 6,450,000 boxes, or over 17,400 carloads, valued at some \$7,635,000 to the growers. A temperature of 23 degrees above zero throughout southern California a few hours some of these winter nights would diminish this value by some \$4,000,000 or \$5,000,000—perhaps ruining the whole crop for market. It has been estimated that some \$40,000,000 or \$42,000,000 has been invested in orange and lemon-growing industry in California. A few hours of temperature below 17° above zero would rain from one-half to one-third of this investment and wipe out the toll of years. The most reliable meteorological reports in southern California show that during 27 years the mercury in the citrus-growing valleys has never been below 24° above zero, and that only for two hours at dawn on the morning of Dec. 24, 1891. For several years the temperature in the orange and lemon groves has never fallen below 30° above zero, and then only for a few minutes at daybreak. It is, therefore, seen that a device by which the temperature in a citrus grove may be raised only a few degrees, and for a short period, when there is extra dread of frost, will almost always suffice as a protection to trees and fruit.

### SMUDGE FIRES.

Many men engaged in growing oranges have tried the smudge bonfire means of raising the temperature among orange groves. On the day or the evening previous to the anticipated visit from Jack Frost, pans, kettles and all manner of vessels by hundreds are arranged between the rows of tree, and are filled with tar or crude petroleum. When the mercury is slowly lowering at 1 or 2 A. M. the contents of the vessels are lighted, and a black heavy smoke arises and floats over and among the trees or trees. Other growers create a smudge by bunches of green vegetation, but both methods are expensive and cannot always be exercised because of a lack of materials at the very time they are wanted. A large number of the best horticulturists pooh-pooh the idea of raising the temperature of a piece of land by smudge fires. They say that the warm air from the fires rises fast, cold air rushes down from the upper atmosphere to the earth, and then up again, thus creating a draught that is more productive of frost damage to fruit than without smudge fires.

### CANVAS OR BURLAP C OVERINGS.

For a few citrus fruit growers have adopted the method common among the lemon and orange growers in Sicily and along the coast of the Mediterranean by covering their trees with canvas or burlap when the mercury is slowly descending. This plan, however, will never be popular, because it is expensive, involves great labor in getting the coverings out and properly placed when there is a suspicion of a visit by Jack Frost, and in a settlement of orange growers labor cannot be had many times at any price, when every one is fearful of damage by a cold wave. To make the coverings on the trees do their best service, huge poles must be set up between the rows of trees, and wires strung permanently from one pole to another, so as to be ready for the fatal night of coldness. The poles and wire are a perennial nuisance when the oranges are picked, and each day that the incessant round of plowing, cultivation and irriga-

tion takes place in the grove. Besides there is heavy expense to thus equip a grove, and the coverings are by no means a sure armor from the attacks of frost.

### PETROLEUM FIRES.

The apparatus that H. D. Everest of Rochester, N. Y., a stockholder in the Standard Oil Company, had constructed at his famous 80 acre orange grove near Riverside, Cal., a few years ago has been found quite practical for fighting frost, but its cost is very heavy, and a man will think a long time about having a similar apparatus in his own grove—until he knows that it is an absolute annihilator of frost in any degree. Mr. Everest had common iron gas pipes laid one foot in the soil, between the rows of trees. These pipes led to several covered reservoirs, like huge hogheads, perched on a trestle some 20 feet in the air. Then at intervals of 50 feet among the trees he had set up iron pipes 10 feet high, and on the top of these were fixed flaring oil burners, which produced a mammoth flame and clouds of heavy soot. The reservoirs were filled with crude petroleum (which is very cheap in southern California) by reason of newly discovered oil wells), and the oil ran by gravity through the system of pipes to the burners. Mr. Everest also equipped his home among the orange trees with electric thermometers, so fixed that when the mercury went down below 30° or 34° above zero little bells would ring, and the hired men would be called from their beds to light the flames at each oil burner. A half dozen men could quickly turn on the flow of oil at the several reservoirs, and torches in hand, could run from burner to burner until the whole grove was illuminated by the uncanny, smoky flames. This novel anti-frost scheme has been tried several times, but since the grove play during the summer season. When December comes the lattice sections are put back on the framework, and the great roof once more is a barrier between frost and ripening fruit.

### ARTIFICIAL WIND.

The State Horticultural Commission of California has been giving much attention lately to the most unique idea yet proposed for fighting frost in the orchards. A young ranchman in Santa Barbara County has come forward with a plan for producing economically and easily wind currents. Frost always comes on calm, clear nights, when there is not a breath of air stirring, and no dampness in the atmosphere. If a breeze springs up in a cold night the grower rejoices. Now, this young ranchman proposes that breezes among the orange trees may be made by the use of bricks of some chemicals, which when fired will liberate gases so as to make a draft or wind current. Just what the composition of the bricks may be he is not chemist enough to say, but his crude idea is so good that a score of scientists throughout California are now at work upon it. The State Horticultural Commissioners say there is no doubt that if wind currents can be generated for several hours, when Jack Frost hovers near an orange grove, the temperature may be raised three or four degrees by the mixing of the air strata. That's enough to save a crop.

The field for invention along the line of killing frost in the semi-tropic land is growing, and he who gives the grower a safe, cheap and easy means of raving their crops of oranges and lemons from their grim enemy year after year will be the most popular man in California, and soon make a royal fortune besides.—Correspondent New York Evening Post.

### A WORD ON GRAPES.

The grape article by Mr. Chambers in a recent issue of your paper gives support to the continuing of growing Concords and Niagara for market. Now it seems to me that there are many varieties which should replace these. Duchess, Brilliant, Diamond, Carman, Campbell's Early, should be planted for market as well as the old Iona and Walter (the best of all).

Over a hundred varieties in my five acres of vineyard I haven't a vine of Niagara or Concord, except as stocks. I still grow some Cottage for jelly. I have little fault to find with Delaware and Catawba, but would add the third red grape, Diana.

I suggest the marketing of five pound baskets containing several varieties, so that they could be used for dessert, adding perhaps some of the bunches with small berries as the Gazelle or Alvey. How much more attractive such a basket would be than one filled with only Niagara, for instance, than in this city.

I have also added a few fine fancy peaches and pears and found that they are appreciated by my customers. Had I a hundred or more acres perhaps this wouldn't be practicable. I am now growing all Cay wood's varieties extant. The standard quality is the highest.

ELBERT WAKEMAN.  
Melincourt, Millneuk, L. L.

### The Famous Apple.

In a recent issue of your paper I notice the quality of the Famous apple is discussed. In this locality the most of the Famous apples are gone. Usually they are small and fit to use and eat in November, not often keeping until Dec. 1.

Now I have a tree of Famous apples that has many apples which measure 2½ and 2¾ inches in diameter, and which prove to be among the latest keepers. Last year I had Famous apples after the middle of April, and my apple crop was very poor. This year I sprayed just as the buds were swelling, using a good, strong solution of Paris green, with plenty of strong lime water.

One of my friends writing you at this time is to say that if a limited number of the readers of your paper will send me their address on an envelope, with stamps to pay postage, I will send them some scions from this Famous tree. Mr. J. Kennedy of Munaville, an apple buyer, says he never saw the equal of my Famous apples.

Minden, N. Y. J. H. KELLER.

### Running out Corn.

One of the solutions of the corn problem is that of yield. In many cases where the yield is so small that it hardly pays to raise corn, the trouble is that the seed has run out. When a farmer boasts of his big yields a few years ago, and then says that he cannot make as good any more, there is trouble with the soil, with the seed or with his methods. Which one of these troubles is at the foundation of his failure is not an easy matter to discover. Most men will not admit that it is their methods. They much prefer to abuse the soil, which is only an indirect way of condemning their methods of culture. If corn is cultivated with an idea of keeping up the fertility of the soil, the latter will not degenerate. We give to the soil as much as we take from it. The trouble with most of us is that we like to take a little more than we give, and in the course of time the soil degenerates and becomes poor.

But the degeneration of the seed, or the running out of the corn, is often more dangerous than permitting the soil to go back on us. Annually the yield and quality of the corn declines, and yet we continue to use the same seed. Among the dozens of different kinds of corn recommended there are really only a few breeds that are first class, and when a farmer secures such seed he is apt to stick to it. But the trouble is that these good breeds are maintained at their high standard only by careful artificial methods of breeding and cultivating. They will degenerate very rapidly if not carefully handled. When you get new seed of an excellent breed of corn it has sufficient vigor to adapt itself to the new soil and conditions. But each year thereafter there will be a little falling off from the high standard. For the first two or three years there will be little appreciable change, but after that the vigor of the seed weakens rapidly. Good culture and congenial environment will go a long way toward conserving the force of the corn, but even these will not do for all time. The corn plants become weaker and are more susceptible to attacks of insects and blights and droughts. The yield and quality grow smaller every year. There is only one corrective to all this. Know the seed, add new blood and vitality and keep up the high standard.

W. E. EDWARDS.

The horse breeders of Nova Scotia are well supplied with well-bred trotting stallions and sires too. Mr. J. K. Hogg of Shelburne, N. S., from whom we received a pleasant call last week, informed us that among the stallions in this section are Abbot Wilkes (21), by Red Wilkes; Warren Guy (212), by Princener; Farron (202), by Allerton (202) and other good ones. Mr. Hogg himself owns two or three, one of which is Black Volunteer, by Volunteer Prince 1612; dam by Dan Morrill, a son of old Morrill; second dam a son of the thoroughbred imported Stag. Volunteer Prince was by Volunteer 55. His dam, Fanny, was by the old Drew Horse of Maine, his second dam by Whithorn Messenger, and his third dam the Old Eaton. Black Volunteer, as his name indicates, is black, and transmits that color to his offspring with great uniformity. Another of his stallions is a 16-hand son of Mascot. The latter was by Owams (222). Mr. Hogg prefers a good stallion for road purposes to either a mare or gelding. He had a remarkable roader stallion a few years ago that was sired by Live Oak, an inbred Morgan stallion, owned at one time by the Rev. W. H. Murray. A likeness of Live Oak appears in that gentleman's entertaining book "The Perfect Horse." Mr. Hogg greatly enjoyed driving this son of Live Oak. His dam was a thoroughbred daughter of imported Saladin. She could show a 2.50 gait at the trot on a loose rein, and though a thoroughbred was as honest a trotter as could be found. This Saladin cross is found in the pedigrees of many of the best trotters that have been raised in that section.

Mr. Hogg is an advocate of the right kind of a thoroughbred cross in a trotting pedigree. He likes to have it close up and in strong infusions. He says that judging from what he saw and the animals that he priced while in Boston, good horses are selling for more money down in his section than in this city.

## AGRICULTURAL.

Sophie 7th of Hood Farm.

We present to the readers of this paper this week the first picture of a daughter of the bull Torono, owned at Hood Farm, Lowell, Mass., ever published. Her name is Sophie 7th of H. F., and a great little cow she is. She was dropped June 10, 1895, and had her last calf March 19, 1900, a solid colored, fine looking bull by Pedro Sigal Landseer. With this calf she made a butter test of 16 pounds 4 ounces on a grain ration of 9 pounds. It was divided up as follows: 24 pounds bran, 3 pounds corn meal, 2 pounds ground oats, 1½ pounds cottonseed meal.

Sophie 7th is a grand individual. She is a perfect type of a dairy cow, is an economical producer and a very persistent milker. Torono, her sire, has three daughters in the 14 pound list, including the show cows Figgie and Marna.

Torono is a full brother of Sophie Hudson, that gave in 10 months 11,466 pounds two ounces milk, testing 7½ pounds 14 ounces butter. The cow of Sophie 7th of Hood Farm was Dame Quickly 8th. She was a cow capable of a good butter test, but was owned by a man who sold milk, and consequently she was never bred for a record. Dame Quickly 8th is by St. Heller Lowndes, out of Dame Quickly 7th. St. Heller Lowndes is by Lord Darlington's Victor S. Heller, out of Conata, 27 pounds, full sister to Lady Essex, 18 pounds 12 ounces. Lord Darlington's Victor S. Heller is by Lord Darlington, out of Pavon, a daughter of St. Heller. Dame Quickly was a very excellent cow. It was estimated that she made 600 pounds of butter in a year. She is by a son of the Jersey Belle of Salt Lake bull Black Defiance, and her dam is out of the imported cow Coronis, 14 pounds. Tasse is in the Hood Farm herd a full sister of Sophie 7th with a butter test of 14 pounds, 3½ ounces.

The Toronto stock at Hood Farm is valued very highly, and it looks as though he would be as propitious as his sire, Sophie's "Tormentor," in getting cows that combine beauty with utility.

## Live Stock Notes.

The Riverside Cattle Company at Ashland, Neb., have purchased an entire herd of 131 Hereford cattle in Indiana with the bull D plomat at the head, an animal for which \$5000 has been refused. They have now 1650 head, said to be the largest herd of registered cattle in the world. They have 25 bulls, none of which cost less than \$1000, while among them is the famous "Tint" for which they paid \$3100, and imported Vassour Expert which cost \$3600 last spring.

At the recent Hereford sale at Kansas City, during the first three days 68 bulls sold for \$24 015, an average of \$318 16 each, and 68 females brought \$19 095, an average of \$280 81. Total, for 136 head \$45,110, an average of \$316 88. The yearling Hereford bull Columbus 17, sold for \$3050, a price that has been but twice exceeded at a Hereford sale in this country, by the bull Thickett named above as selling for \$3100, and the bull Champion Dale sold last at same sale at Chicago for \$7500. A two year old heifer sold for \$9055. While our breeders use such stock as this to breed from they are not likely to greatly fear competition from Argentina.

The farmer who uses the slow ox for his farm work instead of the quicker motioned horse team may plead as excuse for so doing that the ox can easily eat enough in an hour to serve as a meal, and the process of digestion is not interfered with by working at his usual speed and strength for ten hours in a day. The horse should have about an hour and a half at each meal, and then if kept busily at work should not work more than eight hours in a day. He needs longer time than an hour for his noon meal, and if he does not have it the owner may look to see him losing flesh if fortunate enough to escape attacks of colic. The ox can be so fed that it will be more valuable for beef after doing a season's work than in the spring, while the horse loses value during the same time, and has lost most of his value in a few years. Then, too, it is possible and not difficult to train a yoke of young oxen that they will walk about as fast as the walking gait of the average farm horse. If prices on horses keep advancing for the next five years as they have in the past five, many farmers may feel obliged to return to the use of the ox team again, even if they do not like to do so.

At the Kansas Agricultural College they began on Feb. 13 to feed 80 steers in four lots, without having them followed by hogs to pick up undigested grain, as is the usual custom there. They averaged to weight 1036 pounds each at the beginning, and were fed 116 days, when they averaged 1307 pounds each, an average gain of 271 pounds, or about 2½ pounds each per day.

Lot one had shelled corn and whole alfalfa hay and gained 262 pounds each. Lot two whole corn and alfalfa hay cut in inch lengths, and gained 257 pounds each. Lot three had cornmeal and whole hay and gained 273 pounds each, and lot four had corn meal and cut hay, and gained 283 pounds each. The average feed for the four lots was 747 pounds of grain and 388 pounds of hay for 100 pounds of gain.

The two lots having whole corn gained an average of 260 pounds each, and those having cornmeal gained 283 pounds each. This showed a gain of 8 8 per cent by grinding the meal. One lot having cut hay did not gain as much by five pounds each as those on whole hay, but when grain was ground those on cut hay made 20 pounds more gain per head than those on whole hay, and comparing the two lots on cut hay with the other two, there was an apparent gain of 2.6 per cent by cutting the hay. The two lots having cornmeal gained 100 pounds on 718 pounds, and those on whole grain required 780 pounds to make the same gain.

Another way of comparing it is that the gain on whole corn, whole hay, was 7.1 pounds to the bushel of grain. On whole corn and cut hay 7.3 pounds, on corn meal and whole hay 7.4 pounds, and on corn meal and cut hay 8.2 pounds.

## Hood Farm Calf Scour Cure

"I had a calf afflicted with scour very badly. Hood Farm Calf Scour Cure was recommended. I gave it a trial and had better results from it than from any preparation I had ever used." ANDREW BELL, Newmarket, N. H., Oct. 2, 1900.

"I have used Hood Farm Calf Scour Cure. One calf was weak when it began to scour. I gave the Cure and the effect was fine. The calf was soon better." J. F. HEMENWAY, Chelsea, Vt., Oct. 31, 1900.

Prior \$1, or by express, \$1.25. On orders amounting to \$5, we prepay express. We shall be pleased to answer all inquiries relative to care of dairy cows and swine.

C. I. HOOD & CO., Lowell, Mass.

Mention this paper.

They were well fattened, as will be seen by Armour & Co.'s report that the entire lot dressed 59.8 per cent. of live weight, and gave 6.7 per cent. of fat, making good, clean, bright looking beef.

The Cable of London, England, says there is danger in feeding mangel to male sheep. Some have died after being so fed, and a post-mortem examination has shown the bladder filled with pinkish white crystals really salts of potash, too large to be passed off. Many farmers will not use them until they have been partly withered by sun and wind, which seems to remove those dangerous properties. Ewes may be safely fed with them. It is said, but not certain, that they will lose flesh in doing so.

A fat animal contains within its own body the material for creating heat. If the food given is not sufficient for this purpose, it can feed upon or absorb and assimilate the fat of its own body, if the digestive organs are in condition. But when meat is not needed, it has the same power to convert this fat into the butter fat of the milk. The fat cow will produce milk with more fat in it than the lean cow when both are receiving rations not sufficient in quantity or up to her requirements in quality, but she will lose flesh in doing so. When we put fat on a cow, we are feeding fat into her milk that will be shown when she is on short rations, and we never claimed that we could increase the butter fat in the milk in any other way unless we had a cow that would not fatten when giving milk. In that case the fat-producing food will have its results in the milk if the animal can digest it. If she cannot it must pass of in some other way. The often-quoted test of feeding tallow to a cow, and finding that her milk had no more fat in it, does not prove anything. The cow is not a meat-eating animal, and we have no reason to believe that she would make any more tallow or butterfat if she was given suet, lard or castor oil in her food. But give her fat-producing food that she can digest and assimilate into her system, and the fat will go to milk, flesh or tallow, and when in either of the latter she can draw upon it to add to the milk.

## Butter Market.

The scarcity of the extra grades of butter is more marked than last week, and buyers are hunting for it at 24 cents, although most of the assorted sizes are bringing 23 cents. New York large tubs and Western assorted spruce tubs 22½ cents, with large tubs ash tubs at 22 cents. But, as we have said, some strictly fine-flavored lots command a cent above these figures. Below these grades the supply is ample, and last week's price rule. Eastern ranges from 20 to 22 cents, firsts 20 to 21 cents, and seconds at 18 to 19 cents. There is a good demand for June butter from storage, and some extra choice lots go at 22 to 23 cents, but they are scarce, and more goes at 21 cents, with good firsts at 19 to 20 cents. Dairy is in fair demand at 20 cents for extra Vermont and 19 cents for New York, with firsts 17 to 18 cents and seconds 16 to 17 cents. Renovated butter is in better demand again at 16 to 18 cents for choice fresh made and 13 to 14 cents for fair to good. Imitations dull at 13 to 15 cents, and ladies 13 to 14 cents. Boxes and prints in fair demand at 23 to 24 cents for extra northern creamery, 23 to 24 cents for extra western, 21 to 22 cents for extra dairy, and 19 to 20 cents for common to good. Export demand was better last week, and dealers would like to ship 10,000 to 20,000 packages of medium and lower grades, and if these shipments sell well they may do so.

The receipts of butter at Boston for the week were 17,329 tubs and 14,414 boxes, a total weight of \$41,841 pounds, including 89,828 pounds in transit for export, and with the latter excluded, the net weight is 753,119 pounds, against 568,293 pounds the previous week and 587,693 pounds the corresponding week last year.

The exports of butter from Boston for the week were 318,793 pounds, against 74 pounds the corresponding week last year. From New York the exports were 9839 tubs, and from Montreal by the way of Portland and St. John, N. B., 508 packages. These exports from New York and Boston are the largest for several months.

The Quincy Market Cold Storage Company reports for the week as follows: Taken in, 309 tubs; out, 6735 tubs; stock, 30,624 tubs, against 459 tubs same time last year. The Eastern Company reports a stock of 7078 tubs, against 2285 tubs last year, and with these amounts added, the total stock is 657,702 tubs, compared with 33,744 tubs, an increase of 23,958 tubs.

## The Hay Trade.

If we judge the hay crop at last season by the receipts in Boston we shall have but little reason to believe the crop was a light one everywhere in the country. During the year 1900 we received 15,237 tons, while in 1899 we received but 15,274 tons, an increase of nearly 3000 tons. But the drought has caused an unusual demand for hay through eastern Massachusetts and in some other parts of New England, while it has been very difficult to get ears in the West to bring the hay along as fast as we want it, or as rapidly as the sellers want to dispose of it. Boston has perhaps been affected by shortage of ears less than some other points, as the Maine and Canadian shippers have been better supplied than the Western railroads, where everything available seems to have been needed for the large grain traffic. It is said that in the West and Northwest there is still an enormous amount ready and waiting for transportation, and some are prophesying good hay at \$15 in Boston before the new crop is out.

There is also an accumulation of hay here, as 487 carloads were received last week, 388 of which were for local trade and 79 for export. Prices are nominally about the same as last year, but hardly as firm. Cholos timothy \$18 to \$19 a large bale, \$17.50 to \$18.50 for small. No. 1 \$17 to \$18 for large and \$16 to \$17.50 for small. No. 2, both sizes at \$16 to \$17. No. 3, clover mixed and clover \$15 to \$16 both sizes. Long rye \$16 to \$17, tangled rye \$11 to \$12, and oat \$9 to \$9.50.

Potatoes are in liberal receipt. Aroostook Green Mountain extra 68 to 70 cents, but must be fancy to bring over 68 cents, fair to good 65 to 67 cents. Hebron extra 65 cents, fair to good 60 to 63 cents. Dakota red 65 cents. York State white 55 to 58 cents for round and 55 to 58 cents for long. Western white 55 cents for round and 50 cents for long. Jersey sweets dull at \$1.50 to \$1.75 for double head barrels. New Bermuda potato \$5.50 to \$6 a barrel.



JERSEY COW LADY SAFETY.

wanted, and a steamer is about to be chartered to take a load from St. John, N. B.

Many farmers are holding for stravastry high prices. One farmer west of Montreal has 500 tons on hand, a part of it kept since 1897, and he asks \$10 per ton for it. Another near him has 50 to 100 tons for which he wants \$9 per ton loose in the barn, which would make it cost nearly \$11 baled. They may hold it too long. On the north shore of the river sales have been made at \$9 to \$9.50 for No. 1, and \$8 to \$8.50 for No. 2, free on board. In Montreal No. 1 is quoted at \$10.50 to \$11, and No. 2 at \$9 to \$9.50.

At points south of the river the price is about as high as he is. There is a fairly good demand for export to United States, Great Britain and South Africa. Nice briar & oat straw in earload lots is quoted at \$3.50 to \$5.50.

**Domestic and Foreign Fruits.**

With receipts from Aug. 12 to date, 571,451 barrels and 44,186 boxes. To same date last year 471,565 barrels.

**Quotations:** Boston and Maine Baldwin No. 1 light \$3.88 to \$4.32, seconds and slack packed \$1.90 to \$3.54. New York Russets \$2.75 to \$3, seconds \$2.28 to \$2.52.

No. 2 Sois Baldwin \$3.88 to \$3.24, seconds \$3.40 to \$3.88. Newton Pippins, large \$1.80 to \$1.85, California Newton Pippins, four pears, \$1.80 to \$3.20. Oregon No. 1 Pippins \$1.92, Canadian Baldwin \$2.50 to \$2.88, seconds \$2.12 to \$2.32. Spys \$4.32 to \$4.50, seconds \$3.38 to \$4.32. Greenings \$3.88 to \$4.50, seconds \$2.46 to \$2.88. Russets \$3.36 to \$3.64 seconds \$3.33 to \$3.52.

C. B. Lawrence received the following cable from Liverpool, under date of Jan. 23: "Arrivals are bad condition. Baldwin \$3.88 to \$4.32."

**New York Markets.**

Thus far this has been the best winter, for more than 20 years, for outside business; it has been cold and dry for more than six weeks. There is just enough snow for good sledding and sleighing, and it has been improved.

One of my neighbors hauled 45 cords of bark four miles with one ox team and one horse team in five days. Bark is worth \$5 per cord. Hay sells at the barn for \$12, but at present there is no hay of any account for sale.

There are many silos in town, and all owners, so far, are pleased with them. Almost every one who has a silo has a few tons of hay to sell to their neighbors, or others, while those who have no silos are generally short of hay. The silos have evidently come to stay.

There has been little sickness in this town, but quite a number of deaths. David Doloff, one of our best and most prosperous farmers, recently died in his chair, though in usual health so far as the family knew. He was in his 78th year.

Stock of all kinds is wintering well. Stock of all kinds is wintering well. Barnacles and Herring are now in all parts of the country for several years past, and there is no longer any doubt that it is driving the smoke house out of business.

Kraemer's Liquid Extract of Smoke is made from selected hickory wood. It is applied to a brush or sponge. It contains the same ingredients that preserve meat that is moved in the old way. It gives meat a delicious, sweet flavor and gives it perfect protection against insects and mould. It is cheaper and easier to use than the old way. Information concerning its use, cost, etc., can be had by writing to the makers, E. Kraemer & Son, Milton, Pa.

Mr. Vernon, Me.

The imports from Asia, have increased more than \$50,000,000, chiefly in sugar and raw materials for our manufacturers, such as silk, hemp, jute and tin, but our exports there have increased nearly \$10,000,000 in manufactured goods and raw cotton.

There has been but little apparent increase of imports from Oceania, but the statistics of imports from Hawaii for the last half of 1900 have not been received. Our exports there have increased slightly \$20,000,000, mostly in manufactured goods.

Imports from Africa have increased about \$6,000,000 mostly in raw materials for manufacturers, raw cotton forming a large part, but we have sent them about \$17,000,000 more than 10 years ago, mostly

in manufactured goods.

It will be seen that our large increase in trade during the 10 years past has been to a great extent to our manufacturing,

although the increased amount of our agricultural products, and their higher prices, show a large increase to European and North American ports, and the farmers are sharing in the prosperity.

—A writer in the Medical Classics found

through a microscope at a closely shaved place, "that the skin resembled a piece of raw meat." "To remove the skin perfectly requires," so says, "not only the removal of the hair, but also a portion of the epidermis, and where shave means the removal of a layer of skin all around. The blood vessels thus exposed are not visible to the eye, but under the microscope are clearly seen. The skin is covered with a minute network of vessels, which drop, protuberances, such treatment. The nerve fibers are also uncovered, and the pores are left unprotected, which makes the skin tender and unhealthy. This sudden exposure of the inner layer of the skin renders a person liable to cold, rheumatism and sore throat."

—A patrolled forest covering an area of one hundred square miles has existed for centuries in Arizona. Thousands and thousands of petrified logs strew the ground, and represent beautiful shades of pink, purple, red, gray and yellow. One of the stone trees spans a forty foot wide.

## GOOD BYE! A SMOKE HOUSE.

Kraemer's Liquid Extract of Smoke Makes it Useless.

The smoke house always was a source of worm, vermin, vexation and expense, anyhow.

It is often difficult to get up in smoke houses.

There is a better way to smoke meat.

Try Kraemer's Liquid Extract of Smoke. It is being gaining in all parts of the country for several years past,

and there is no longer any doubt that it is driving the smoke house out of business.

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A Familiar falsehood.

When a customer seeks to purchase some well-known, widely advertised, standard article, and the dealer tries to sell him something else, claiming the offered substitute to be "just as good," that dealer is guilty of flagrant falsehood.

If the substitute were just as good it would sell on its own merit, and would be called for by customers instead of having to be unloaded upon them by means of falsehood.

The very fact of the comparison "just as good" proves the claim

## POULTRY.

## Mixed Breeds for Market.

Most of us advocate the raising of different breeds separately, and in the long run this probably is the best system, especially in the majority of cases, but there are exceptions to this rule. I have in mind a neighbor who raises thousands of broilers for market every year, and his birds are all so good and fat that he has little difficulty finding a good market for them. They are always classified as extra fine in the city market, and he gets the top prices. Yet this man never separates his breeds. He raises them up hopelessly, Wyandottes, Leghorns, Plymouth Rock, Minorca and Langshans. He tells me that he puts no stock in breed for the average grower, except that the individual birds which he buys must be extra fine. He advises that the careful breeder is necessary in his business, for without him the different varieties would not reach the high excellence they have attained. But it is not his business to emphasize or carry the breeding of one or two varieties any further. He secures the best results of the breeders, and then mixes them together to produce marketable fowls, broilers and roasters.

The secret which he thinks is at the bottom of his success is that of careful selection of individuals and proper feeding and treatment. He permits no fowls to come to his place that are not fine specimens of their particular breed. He makes it his business also to fatten young pullets and fowls for market which he purchases from the farmers. His men scour the country for miles around and buy all decent fowls of the right size, paying cash for them. The men have instructions to take all that they can get, provided they are strong and healthy looking birds. They may be thin and half fed, but they must be healthy looking and not affected in any way by disease. These fowls are brought to the farm and then hopelessly mixed in the fattening yard. When they have been kindly treated and fed for several weeks they are ready for the market. In nearly all cases they are fine fat birds, and when dressed for market they show very little difference in appearance. They all bear the trademark of this energetic man. They are fat and plump looking, and one can tell by the touch that their meat is deliciously soft and tender. Now the change created in the young fowls is due entirely to the feeding and careful treatment. Bad condition as the result of bad treatment is never apparent in these birds. The whole experience of this successful poultry dealer seems to emphasize the fact that careful business methods will pay even in farming. We must learn to do the best for the consuming public, and then we will get the most for our work.

Pennsylvania. ANNE C. WEBSTER.

## POULTRY AND GAME.

The poultry market is quiet and steady. There is a fair demand for choice fresh killed chickens and small hen turkeys, but this stock is very dull. Fresh killed chickens bring 14 to 15 cents for choice large and 9 to 11 cents for fair to good. Fowl, extra choice, 11 to 12 cents and fair to good 9 to 10 cents. Ducks 12 to 14 cents, geese 10 to 12 cents. Pigeons dull at 75 cents to \$1 a dozen and squares \$1.75 to \$2. Western dry packed chickens, choice, 11 to 12 cents, fair to good 8 to 10 cents. Fowl, good to choice, 8 to 10 cents. Capons, choice large, 13 to 14 cents, medium and small 11 to 12 cents, old roosters 6 cents. Turkeys, choice hens drawn, 12 to 12½ cents, undrawn 11½ to 12 cents, mixed weight, choice, 10½ to 11 cents, young toms 9 to 10 cents, No. 2, 7 to 8 cents. Duck 10 to 12 cents and geese 8 to 9 cents. Live poultry in light supply. Choice large fowl in demand at 10 to 12 cents, chickens 8 to 10 cents and old roosters 6 cents.

Game is quiet, but grouse and quail are in light supply and firm at \$1 to \$1.20 for choice dark grouse, 75 cents to \$1 for light pair. Quail choice \$1.75 to \$2 a dozen, and poor to fair \$1 to \$1.50. Ducks selling very slow, can now back at \$1.50 to \$2 a pair, red head \$1.25 to \$1.50, black 80 cents to \$1, mallard 75 to 90 cents, and teal 50 to 60 cents. Rabbits in fair supply and West. 15 to 20 cents a pair with jack rabbits 40 to 60 cents.

## Practical Poultry Points.

There has been some discussion in regard to the use of the warm mash for poultry in winter, whether it will produce the best results given at morning, noon or night. Personally we prefer to make it the morning meal, and think the trouble with those who claim it does not give as good results as when given at night, with a feed of whole grain in the morning, is, first that they do not get up early enough to get it ready as soon as the hens should be fed, and next that they give so much and the hens are so hungry when they get it that they overeat and are inclined to sit and stand around until the distended crops are near, empty before they will take any exercise.

We would remedy the first trouble either by rising earlier by scalding the mesh the last thing before we retired for the night, covering it up closely and setting it in a warm place to remain until morning, when we would find a little stirring made the whole of it nearly blood warm, the centre being even then too hot for the hens to eat. As regards the other objection there is as much chance of overfeeding and making them lazy with whole grain as with mash.

Then we have a liking for whole corn at night, warmed at least enough to take the chill off it. It is a heat producer, and as the digestion, or grinding in the gizzard, goes on all night, the birds are warmed by it, and there is little danger of frozen combs and wattles.

One of the large packing houses in Kansas City has had 150 men employed this season in killing, dressing and packing poultry, and has handled daily about 15,000 birds.

A man connected with one of the big packing concerns, that annually handles hundreds of thousands of fowls says that the Plymouth Rock is the most popular fowl among buyers and even among retail merchants. They sell at some seasons of the year two to four cents over the market price of other fowls.

The various schemes for tormenting a brood hen until she forgets her motherly instinct by starving, dipping in cold water, or putting her in a barrel where she has to sit in three inches of water, may be well calculated for the main purpose of breaking up her broody inclination, but they are not often successful in getting her back to egg production again. Nine times out of ten we think a young, well-fed hen will hatch out her nest of eggs, care for the chickens until large enough to care for themselves, and get back to profitable laying sooner than she would if she had been broken up by any of these harsh methods. She is literally broken up physically, and if she

produces a few eggs she will not lay many before the experience has to be gone through again and again, until she is ready to molt, at which operation she will spend from three to five months. We would sell it more profitable to kill the hen for the table if we did not care to let her hatch a litter of chickens.

While we like fresh eggs according to the old rule, "not over three days old in summer or five days in cold weather," very few who have not large flocks of poultry can have them so whenever they please. The cold storage plan seems now to be the most approved method of keeping them from the summer supply until wanted for the winter use, yet if one has a place where the temperature can be kept nearly down to 50° and never going above 50°, they keep very well for some months in vented cases, if they are packed the large and down. The non-fertile eggs keep best, and that position prevents the expansion of the air in the shell. If they are separated by the paper partitions in the case, the tainted egg does not necessarily injure others, as it does when they are in contact.

We have seen them packed in chaff, in wheat bran and in oats, but there is always a chance of such material gathering dampness and becoming musty, in which case the egg soon acquires an unpleasant flavor. Greasing the shell is all right until the grease or butter begins to get rancid, and in France they use olive oil, in which they are melted beeswax, which gives better results. Pecked in salt or in brine they keep sweet, but the yolk is hard, and the white gets quite salt. Limed eggs put up in a mixture of 14 pounds quicklime, 10 ounces of salt and two ounces of cream of tartar in two gallons of water used to be a method among farmers and even dealers, but they would be almost unusable now. But whatever process may be tried it is desirable that the hen should have no male with them, and that the eggs should be fresh laid when treated or not more than a day old.

If one wants to raise broiler chickens for profit we think the sooner he sets a flock of pure bred fowl, the better will be his chance for success, for we know of none that makes as good broilers, and at an early age, as the Barred Plymouth Rock, though the White or Silver Laced Wyandottes come very near it. We have seen good broilers from crossbred birds, but we never saw a flock that were all good birds, as they will be from either of the above pure breeds. They grow to broiler size quickly, are hardy and vigorous, and good feeders, and make plump breasted, yellow-legged chickens that take the fancy of the buyer. For an entire lot like that, a much better price can always be obtained at any large market that can be got for a mixed lot in which there are some with black legs, long necks and thin breast, such as may always be found in a cross breed flock. If we were going into the business we would buy a trio or more of as good birds to breed from as our money would enable us to get, taking especial care in selecting a good formed male, and from them we would raise the pullets to start our flock. The next season we would hope to have enough of them to justify the purchase of a good incubator, and large enough to start it in operation in January with brooders to raise the chickens in, and we should expect to get good prices for all the chickens we get from the brooder.

At the meeting of the Illinois State Horticultural Society Professor Waite of the United States Department of Agriculture said that the way to combat the bitter rot of peaches and plums was to clean up the orchard, cultivate, clean out all old manured and rotten fruit and spray properly. H. S. Mr. Rump of Marshallville, Ga., sprayed his orchard of 175,000 peach trees four or five times, and secured 180 bushels of good marketable fruit. There are two kinds of bitter rot in the apple, both belonging more particularly to the southern part of the apple belt, and entirely different from the apple scab, which belongs to the northern apple growing regions. There is but the one remedy: to clean up the orchard and spray the trees well with Bordeaux mixture before the leaves have formed, again when in bud, then three times after blooming. All of the professors seemed to be of the opinion that the bitter rot could be cured if the work of spraying and other methods given above were begun in time and properly carried out.

At the meeting of the Missouri State Society Professor Stinson gave some of the results of his experience in spraying for the bitter rot. He sprayed four or five times, and chose sections of orchards where the trouble had been the worst, and it is probable that the results would have been more satisfactory if it had not been for the disease or fungus on the trees surrounding those that were sprayed. Yet on one sprayed plot he obtained 98 bushels of perfect apples, and 67 bushels that had not in small specks, but which were sold to the evaporator. On the adjoining plot there were two bushels of good fruit and 148 bushels not even good enough for the evaporator. Another sprayed plot had 257 bushels of good fruit and 70 bushels with bitter rot, while the unsprayed plot had 18 bushels of good fruit and 104 bushels with bitter rot. Spraying retarded the ripening of the fruit about 10 days or two weeks.

We report this, because despite what Professor Waite says, the bitter rot is by no means unknown in New England, and it may have been very troublesome in some orchards, though we think it does not spread here as it does farther south. But we have known it on some varieties for more than 25 years.

There is a large variation in the value of wood ashes. There are some varieties of hard wood which are said when clean and fresh burned to contain as much as 16 per cent of potash, but if samples analyzed at the Experiment Station a fair average of a good article may be placed at 6 per cent of potash, 2 per cent of phosphoric acid and 32 per cent of lime. There are many lots which contain so much dirt, or are from soft wood, which do not show as much as this, but we are writing of good hard wood ashes. The market value of these elements near Eastern shores are about 6¢ a bushel for the phosphoric acid, and five cents for the potash, which is about \$1 a ton for acid phosphate, 18 per cent, strong, and \$60 a ton for muriate of potash, 50 per cent, actual potash. The 60 to \$60 pounds of 140 pounds phosphoric acid, 40 pounds, worth \$2, and 180 pounds of potash \$6,600, making the ashes worth \$10 to \$10 per ton. As usually the bushel is calculated at 50 pounds there should be 40 bushels in a ton, worth 25 cents a bushel. Those who buy should buy upon a guaranteed analysis, and if they get a pure article of the above strength they will find them worth that to 10¢, and the farmer who burns wood would be very anxious to sell the result of his hard wood fires at that price. They are what is needed on most soils to grow a good crop, and clover can be grown where ashes have been put on, and the clover will give good crops two years and then the roots plowed in well furnish nitrogen enough for a grain or root crop.

Where the ashes cannot be obtained the above formulas will be a guide for mixing a fertilizer which will be a substitute for the ashes, 300 pounds of acid phosphate and 240 pounds of muriate of potash, with some 600 pounds of sulphate of lime or land plaster would furnish about the same elements as the 40 bushels of ashes. This might be enough for two acres, or none too much for one, according to the character of the soil and the crop to be grown. We should prefer in most cases to use it on one acre, as the crop will take no more phosphoric acid or potash than they need to perfect their growth, and they do not waste either by evaporation or by leaching, as are stored for future crops. For many crops we should add about 200 to 300 pounds of manure to the above, if the land had not been furnished with nitrogen from stable manure, or by a slover or other nitrogen

"You would be surprised if you could have me when I come to see you now," writes Mrs. Isaac S. Harris, of Gayville, Yankton Co., So. Dakota. "I had no appetite, was extremely tired and so nervous I could not sleep. We have spent a lot of money doctoring, but there was not one thing that I took that did not help me. I am now in full health again. I am using Dr. Pierce's Favorite Prescription and 'Gordon Medical Discovery.' In three days after I commenced taking it I was able to sit up and get about, and from that could not sit up any longer, the better, and that I have steadily been getting better. Can walk or ride to any place I want to, and I feel like a new person again. Dr. Pierce's medicine is the best I ever had. I can sleep all night and never get up tired in the morning; can eat anything and feel well."

Dr. Pierce's Pleasant Pellets cure biliousness and sick headache.

"On the market, as a rule, this butter



THE ANNATTO PLANT.

often cutting off their own noses to spit some one else's face, as the old saying used to go.

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Dr. J. A. Wiser of the Columbus Food Laboratory says: "It is one of the most subtle of butter frauds, for the reason that it is butter—with a difference.

"In the beginning, much of the good butter made becomes rancid for lack of a ready and favorable market. In addition to this, thousands of pounds of butter are found sometimes that my profits and price were better than those obtained in New York, Boston or Philadelphia. These big cities use an immense amount of green manure, and the Southern farmers supply most of their winter vegetables, and we cannot compete with them successfully.

New York. S. W. CHAMBERS.

## Process Butter.

"Process butter," they call it. It holds a half-way place between oleomargarine and butter. Virtually it is butter without its glycerine constituent, and the reason of the absence of the glycerine involves the process."

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**MASSACHUSETTS PLOUGHMAN**  
NEW ENGLAND AND JOURNAL OF AGRICULTURE

BOSTON, MASS., FEBRUARY 2, 1901.

Strawberries are gross feeders and need plenty of manure. If you neglected manuring them with straw in the fall, cover them now with fresh, coarse horse manure. The winter and spring rains will carry the fertilizer elements down to the roots of the plants, thus nourishing them and removing all the objectionable features of such a covering, and leave a better spring mulch than if light straw had been applied alone at first.

Some varieties of grass start earlier in spring; some better withstand frost in winter, some are less affected by a long continued drought, some hold out later in season, some are more nutritious, some are much more tenacious and long lived. Therefore it pays to make up a mixture for permanent meadows and pastures and not depend upon any one kind. We are using a mixture of blue grass, red top, orchard grass, timothy and clover, and we get much more satisfactory results than if we depended exclusively upon any one of these alone.

Germany is threatening to enact a high tariff law against the products of the United States, being urged thereto, it is said, by German manufacturers, who are jealous of the success which the sale of American goods is finding in the German market as well as other European countries. But we can endure the loss of German trade in our manufactured goods better than they can dispense with us; other goods we sell them. In the 11 months ending Dec. 1, 1899, we exported to Germany goods valued at \$179,134,409, of which \$68,922,915 was raw cotton, \$15,528,829 was corn, \$11,036,981 was lard, \$10,559,519 was copper and \$9,285,592 was kerosene, leaving less than \$66,000,000 for all other goods, and not all of which were manufactured goods, as there were considerable quantities of other provisions, dairy products, oleo oil, and other things. They cannot grow cotton there, nor can they grow corn or fatten hogs as cheaply as we can, or mine copper to compete with the mines in this country, nor have they oil wells like those controlled by the Standard Oil Trust.

The Shepherd's Bulletin has a letter from a Michigan farmer, who for 18 years past has made a business of letting or leasing sheep to others who are unable to buy good flocks. He now has about 2000 leased within a radius of 20 miles of him, and it takes about six weeks of his time each year to look after them in sorting, handling and rearing them. His losses begin in October, and a copy of one which he furnishes shows that he let 75 merchantable grade Shropshire ewes, all of good age and with good mouths, for a term of three years. The party who takes them, cares for and feeds them, and at the end of that time returns all of the original 75 ewes that are sound and of good mouths, and replaces those which are not, with ewe lambs from his share, and he receives for his part all over 25 good sound lambs raised each year, and all the wool. He says that parties who have taken sheep of him under these conditions have worked up a good flock of their own, and are now successful sheep raisers, and of all who have taken them so far are but very few who have not made a good clear profit. There seems to be a chance for this plan being tried in the Eastern States, though perhaps in smaller flocks.

We desire to see the use of the silo of crops for summer feeding, and winter cover crops to conserve or increase the fertility of the soil, increase throughout the Eastern States, because we believe that the large ranges of the Western States are being so much reduced by the increased number of small farmers that they are soon to lose the advantage they have had in the production of beef, mutton and wool. Their advantage may be more apparent than real, because the free pasture they had on government land, or land that they had obtained at a trifling price, has been offset some years by their losses from lack of shelter, feed or water for their herds and flocks. We have heard less of that than of their successes and profits in favorable seasons. But we believe the time is near at hand, if it is not already here, when the farmer upon a farm in New England or in the Middle States can grow and fatten beef cattle, sheep and even swine with a greater profit per head than those on the large ranges. When he can make \$10 on one animal it is as good and much less labor and capital is needed than to make \$10 each on 10. In these early green summer and silo crops we think will be found the secret of this success.

## Winter Meetings.

At this season of the year are held most of the Farmers' Institutes, and the meetings of dairymen's, breeders' and horticultural Associations, at which the farmers who carry on a mixed farming, comprising all of these features and a little more, and specialists who are particularly interested in but one or two of them, can alike find much of interest, and meeting others engaged in the same business as themselves, can acquire from, as well as impart, information to others interested in the same pursuits.

No doubt they have seemed to assume the position of a contest for honors among the experts rather than of any attempt to educate the class who are not breeders of fancy poultry into the desirability of choosing one good breed and adhering to that. In fact, a man who attends one of the larger shows is lucky if he does not go away with the idea that each one of a half dozen breeds is the best, if he buys his stock of the breeder he has interviewed and pays a price sufficiently high. If he wants birds whose price is proportioned to his means or his willingness to pay, he can find parties ready to deal with him, and the result may be such that he will afterward prefer to breed mongrels from his own mongrels instead of the cheap birds or cattle of some one who offers him bargain lots at \$5 per pair that ought to be worth \$25 or \$50, and are not worth over \$1.50. In this way more harm than good often results from these exhibitions.

Yet we would like to be able to attend a half dozen of these meetings every week, not only to listen to the addresses and to examine the exhibits, but to meet and talk with the many farmers, both specialists and those who are interested in more than one branch of agriculture, and listen to their comments upon the speakers and the show. When we have been able to do so, we have often found a vein of sound criticism that had quite as much information and common sense as there was in the utterances of the more eloquent, but sometimes not as deep

thinking speakers, among the careful investigators who had had more experience, but were less able to put the results of it into language.

The editorial chair, however, is about as confused as anything, unless it be the work of the dairyman who feeds his own herds, does his own milking and makes his own butter. For such as one there is no vacation unless sickness or death shall grant a rest.

But if we cannot attend these meetings our position enables us to see the reports of them from our own correspondents and from the local papers, and to gather up for ourselves and our readers the strong points made and the ideas that are advanced by the speakers. We can approve or condemn them, or we can publish them without doing either.

This brings us nearer to the condition the Irishman wanted when he wished he was twin, so that he might be where he ought to be and where he wanted to be at the same time. We can thus report a meeting in Maine and another in Missouri on the same date, in spirit as a poultry show and a dairy exhibit, while badly we are limited to the editorial chair, and we can take our readers with us to as many of them as we please without the trouble or expense of securing tickets for them.

We would wish every farmer to attend as many of these meetings as he can, without neglecting home duties, but if he cannot do that, he can sit by the fire of a winter evening or in the shade on a summer day, and we will bring to him in a condensed form all that we think is most valuable of the transactions of each day. The audience of the speakers will not be limited to the few hundred that can find place in the halls, but will extend through the thousands of families who are regular readers of our paper.

The agricultural addresses at our winter meetings are not now, what they were then, which we listened a half century ago, or even much later, confined to such speakers as knew a little and could tell it in a pleasant way. We have listened to some of that sort with much interest, but when we came to put down what we had learned, a few brief paragraphs would contain it all, and even then we were not sure that the experiences of the speakers, having been under conditions different from those surrounding the average farmer, were of much value to any one but themselves.

Since that day the agricultural colleges and experiment stations have brought out a large number of scientific investigators, who have studied not only results, but the conditions under which they were obtained, until they are very near to reducing every branch of agriculture to a science, that when the conditions are known will produce certain results almost as surely as any mathematical proposition.

We say almost, because there are still unknown quantities or influences which have not been fathomed or measured. At the beginning of the 20th century we are far from attaining a full knowledge of all the sciences of agriculture. The progress of the last half century has taught us much, but the most important lesson is that it has shown us not only how much we were ignorant of years ago, but it has enabled us to see something of the many things that we yet need to study. The primary arithmetic which ends with the tables of the four great principles of adding, subtracting, multiplying and dividing is but a beginning in the science of mathematics, and we have scarcely got farther than that in the science of agriculture.

We are more successful than previous generations were, not, perhaps, in a financial sense, because they were robbing the soil of the fertility stored up in it ages during which it had been uncultivated, and were able to command without wages the services of large families of children, who worked from the time they were able to walk until they had reached maturity or longer, but we can succeed as they could not, in attaining the results for which we are working.

And we doubt not that two generations hence farmers will be able to look back at us now and pity us because the knowledge on which we prided ourselves was so far inferior to their own.

If then, there is yet so much to be learned in the many departments of agriculture, every farmer, old or young, should attend all the meetings of the associations that make specialties of those things in which he is interested, so far as he can, and when he cannot he should obtain the best reports he can of what is said and done, should study them carefully, comparing results with conditions to see how much may be useful to him. He need accept nothing because an eminent authority asserts it to be true, but prepare himself to investigate and experiment for himself on his own soil, and strive to add the knowledge he will obtain in this way to the knowledge of all other investigators.

There never was a time since the days of Adam when the farmer was as high a plane, socially or economically, as he stands today, because there never was a time when farmers were such earnest students of their own business, and never a time when the prosperity of the country depended as much on the prosperous condition of the farmer, and the farther we advance in knowledge and in ability to impart knowledge, the better will the farmer be appreciated.

## The Grout Bill.

The legislative committee of the National Grange has issued the following letter in regard to the Grout bill:

514 F. STREET, N. W., WASHINGTON, D. C.  
The agricultural committee of the Senate, to whom was referred the House bill No. 3717 (Grout bill), has been patiently hearing from Jan. 3 to 14, inclusive, what farmers and the friends of the bill had to say in its favor, and also as curiously hearing what the manufacturers of oleomargarine, their attorneys and friends could say against the bill. The legislative committee had a representative of the committee present at the beginning and close of the arguments.

The arguments are all in and the supreme moment has arrived. If the bill is acted upon at all it must be reported and acted upon in the remaining six weeks of this Congress.

Every farmer and other citizen, in favor of fairness and honesty, who desire to suppress fraud, and who favor all articles sold being what they are represented to be, should write or wire their senators and urge upon them the importance of the passage of this bill. The five or six million farmers who make butter desire protection from having the market for butter destroyed by the fraudulent sale and use of colored oleomargarine. There was made and sold by the 26 manufacturers of oleomargarine in the fiscal year ending June 30, 1900, 107,000,000 of oleomargarine, and, as was shown, over 90 per cent. colored in imitation of butter.

Over \$2,000,000 is invested in the dairy industry of the United States, and unless protection is afforded this vast industry is seriously menaced. He advised every private dairyman to use a

little. Milk pasteurized at 150° loses a little of its finest and best flavor.

Dr. B. H. Stone of the State Laboratory of Hygiene said there were more than 200 varieties of bacterial germs in milk. Some were useful, some harmless, and others dangerous. Some give the desirable flavor to butter. All milk from the cow should be discarded when there was inflammation of the udder. Dairy utensils should never be washed or rinsed in impure water. Cold will not destroy the germs, but may hinder their growth. The best way to destroy them is by pasteurization.

Promptness and earnestness will convince the United States Senate that the great agriculturist's interests are fully advised of the importance of the pending bill and insist on its immediate and favorable consideration.

Fraternally,  
AARON JONES,  
N. J. BATCHELDER,  
E. B. NORRIS.  
Legislative Committee of the National Grange.

## Vermont Dairymen's Association.

The annual meeting of the Vermont Dairymen's Association was held at Burlington, Jan. 8, 9 and 10. There was the usual address of welcome by the mayor of the city, in which he spoke of the importance of having honest dairy products unadulterated by oil, cottonseed oil, or worse material, and the President's address alluding to the successful dairy farmers who had stood by their herds and customers. He thought more attention should be given to cheese making in Vermont, and more effort made to prevent or eradicate disease among the herds. He also spoke a good word for the work of the agricultural colleges, alluded to the need of good roads, and the tendency toward intensive farming, and the importance of making the farm-homes attractive to the young people who grow up there.

The first speaker of the afternoon was John Gould of Aurora, N. Y. He said that what he knew about dairying 11 years ago was not true today. The best statistician he could obtain showed the average production of milk in the country was not over 3500 pounds per cow, which did not pay. Animals should be bred for specific purposes. He was not there to advocate any particular breed, but any animals to be profitable must have great nerve power. Great milk producers have a general resemblance in conformation and form. A cow is good for much that has a dull, flat eye. The best cow has a sound, full, bright eye, a large nostril and an ear pointed forward, showing alertness. The neck should be strong and heavy on the top, but thin and shallow near the head. The sloping shoulder shows nerve power and room for the ribs. The cow should be deep back of the shoulder, long hip and high pelvic arch. This gives great capacity for food. The tortuous milk veins have an analogy to the large nostrils and a wide space between the fore legs. This space gives room for large vital organs, the heart and lungs. A cow doesn't need to be frozen in winter to give her constitutional vigor, as was thought necessary years ago. There would be just as much sense in putting a cow into cold storage six hours every day in June.

He did not believe in the general purpose cow. Crossing the Holstein with the Shorthorn has proved a failure. No man could afford to keep a cow that puts her food to making fat at four cents a pound, when she ought to put it into butter fat at 28 cents a pound. Bad breeding injures the dairy interests more than the oleo frauds. The best breeding for a dairy herd is to have all the cows of one family. It is a mistake to even mix different families of the same breed, and if one has a good bull there is no danger in using him for many years in the same family. Prosperity will not result from having twice 17,000,000 cows in the country, but in having half that number produce as much as 17,000,000 do now.

Being asked about dehorning, he said he had seen five dehorned cows in one box stall, with feed and water boxes at the side and well bedded. They were quiet and contented, and he thought that an ideal way of stabling cows, but it was not practical with horned cows. He liked a thin, elastic skin on a milch cow, not a thick skin. The cow should go dry from four to six weeks before calving, and the heifer with her first calf should be kept in milk 14 months.

Mr. D. H. Skinner of Waitsfield spoke on "The Benefits of the Creamery on the Farm." He thought the dairy industry had made a wonderful development in the past 15 years, through the adoption of creamery methods in butter making. Co-operative dairying had become almost a necessity. Vermont produces more dairy products in proportion to her population than any other State in the Union. Competition is so sharp to make it necessary to combine and concentrate our efforts to produce them at the least possible cost. The creamery has been of the greatest help to the small farmer and the poor butter maker. It has given the farmer's wife relief from the onerous duties of the dairy and leisure to devote to music and books. There should be more confidence between the creamery man and the patron, and would be if the question of poor and dirty milk from the farmer could be eliminated. There is no surplus of ghee-edged butter and never will be. He said the surplus of butter fat was usually 10 to 15 per cent., but it ran higher than 15 per cent. in some months. Professor Gill said the ideal surplus of butter fat should be 16 per cent., but it might be 17, 18 or even 20. Mr. Skinner thought that farmers as a rule preferred taking the milk to the creamery, instead of the cream gathering plan.

The evening was devoted to the woman's auxiliary to the association, and an address by President Buckham of the University of Vermont on the Jersey cow and the Island Jersey, which we gave our readers a year ago or more.

Wednesday morning resolutions were passed endorsing the Grout bill, and Prof. G. A. Smith, director of the experiment station at Geneva, N. Y., spoke upon "Creamery Defects." He said the creamery and the farmer must work in perfect accord, as the poor milk of one patron may seriously injure the whole product. Under the most favorable conditions a half teaspoonful of milk will contain about 400 bacterial germs, which are fungus or vegetable, and not animal growths. Under unfavorable conditions there might be over 20,000 of these germs in the same quantity. Fat increases the number of such germs as multiply so rapidly as to pollute the milk. There cannot be too much care in cleansing and washing all utensils used in the milk. A good starter furnishes clean germs to take possession of the milk and cream, and they have a tendency to exclude the bad germs, but cannot counteract those which have been imparted to the milk in filthy barns, by filthy handling. He advised every private dairyman to use a

bitter. Milk pasteurized at 150° loses a little of its finest and best flavor.

Dr. B. H. Stone of the State Laboratory of Hygiene said there were more than 200 varieties of bacterial germs in milk. Some were useful, some harmless, and others dangerous. Some give the desirable flavor to butter. All milk from the cow should be discarded when there was inflammation of the udder. Dairy utensils should never be washed or rinsed in impure water. Cold will not destroy the germs, but may hinder their growth. The best way to destroy them is by pasteurization.

Professor Hills said there was but little difference in the methods of butter making in 1700 and 1800, but there has been a complete revolution in the last 60 years. Agricultural papers, colleges and associations have done much to educate the people, but not as much as they would have done if it were not for the prejudices and traditions of farmers. During the next century there will be better cows, better keep and better sold. There may not be better milk or better butter than the best of today, but there will be more of that class at less cost. We need a new set of dairymen more than a new breed of cows. A few years ago the Babcock test caused the slaughter of a large number of cows for Mr. Vanderbilt. If he could not afford to keep cows that did not pay for their food, how could the farmer do so? There are two classes of foods, the flesh forming and heat producing foods. Vermont grows enough of the heat producing and needs to buy more of the nitrogenous or flesh forming.

The animal should not be kept too warm or too cold. If too cold she will look out for herself first and her owner afterward.

If kept too warm she will not be healthy. Grooming pays in the cleaner product of the cow. In the future skim milk will be fed to calves and pigs, but will be used for mankind. Dry skim milk will soon be an article of commerce, and probably dried whole milk. In 1850 frozen milk and dried milk will be made and kept indefinitely. Liquid air and sunlight will do the work. Dried milk will be sterile. Cows will be milked by machinery and kept healthy. Professor Smith spoke of cheese making and said the home consumption of cheese was increasing, because of its better quality. He said of three cows of similar weight and fed the same at the Geneva station, N. Y., No. 1 gave a profit of \$43.70, No. 2 of \$1.90 and No. 3 a loss of \$11.20 in a year. They found that 100 pounds of raw milk made 6.5 pounds of cheese, 100 pounds of three per cent. milk 8.7 pounds of cheese, while the same quantity of four per cent. milk made 10.8, five per cent. milk 12.6, and six per cent. 14.6. Cheese stored in a cold room scored much higher when cured in a warmer room, the best temperature being 55° to 60°, while the ordinary factory often has a temperature of 75° or more.

Tuesday forenoon they had addresses on Good Roads and the Pan American Exposition, and on the Typical Butter Cow, by V. E. Fuller of Brooklyn, N. Y., giving the latter. He thought the typical cow to be one that would produce a large amount of butter, and transmit to her offspring the qualities which made her valuable. If a cow is wanted that will be most economical in production of butter fat, the Jersey stands at the head. The modern dairy cow is an artificial product, made altogether different from her ancestors by breeding.

The only outward sign of large milking qualities is a large, lean udder and tortuous milk veins. For sires one should look back four generations for the qualities desired. Cows should be fed before freshening, so as not to be full of milk at calving, but after that feed up to the point of highest milk production.

In the afternoon Mr. Tarrill of Morrisville spoke of the profit of private dairies, the demand for first class dairy butter and the need of better cows, and J. H. Gould spoke on sanitation for the farm and creamery. He advocated cleanliness in all departments, and pure food and water, better floors or no floors in stable stalls, more light and avoidance of dark, damp stables. Absorbents of plaster, S. W. Carolina rock or road dust should be used in the trenches, and stables whitewashed. There should be ventilation by a shaft from the floor to several feet above the top of the stable, and mangers should be cleaned out every day and scoured with hot water and ashes once a week.

**Notes from Washington, D. C.**

Should the Grout bill pass the Senate and obtain the signature of the President, the makers of process butter are certain that the trade in their particular line will be greatly benefited thereby. At the present time process butter is demoralizing the butter market, and is quoted at but a slightly lower price, something like one to two cents cheaper. The foothold which process or remade butter has obtained is owing to many of its claimed superior qualities, and the stamp of approval given it by chemists throughout the country, who have reported that process butter contains none of the impurities found in many grades of so-called high-class creamery. It will "stand up" better than Elgin and will fool the most wary and discriminating.

However, notwithstanding the stamp of purity given to remade butter, little incidents observable at the factories would seem to discount the knowledge of scientists. The agents of the factories soon the surrounding country in search of butter which the farmer or the country storekeeper has on hand or is unable to dispose of otherwise. This is shipped to the factories in boxes, buckets, barrels, and often the rolls of butter are wrapped in dirty cloths with an odor and appearance sufficient to nauseate anything within their influence. The wagons which bring the parcels of butter, barrels, etc., from the freight cars often discharge their loads rather hastily, and in this hasty and brittle fashion a barrel or box is rent in two, the contents spilling out into the mud and slime of the street. Quickily a shovel is brought into action, and the whole mass is transferred into another receptacle, mud, dirt, butter and all. It is removed, washed, rebarred, and is the smiling, golden butter for the market. This is the pure, wholesome process, or remade butter.

Complaints have been received at the Department of Agriculture concerning the sale of impure Paris green and other arsenical preparations for spraying mixtures. In several fruit sections last year, owing to the use of weak, non-poisonous arsenic, the codling moth caused great damage, as the spray



## OUR HOMES.

## The Workbox.

LADY'S MITTENS (SIMPLE).

Two skeins Fiebiger's Saxony worsted, four steel needles No. 16. Cast on 60 stitches, 21 on each of two needles, 18 on a third needle.

Knit once round plain. Then rib by knitting 2 plain and purl 2 alternately for 40 rounds, or until the wrist is as long as desired.

Now take two stitches of one of the ribs for a basis of the thumb, and seam the stitch each side of these stitches. Knit round plain to the rib taken for the thumb, seaming the stitch just as on maturation.

A teaspoonful of the juice in a small cup of black coffee will certainly relieve a bilious headache.

Lemon peel (and also orange) should be all saved and dried. They are a capital substitute for binding wood. A handful will revive a dying fire.

The juice of a lemon, taken in hot water on wakening in the morning, is an excellent liver corrective, and for stout women is better than any anti fat medicine ever invented.

Glycerine and lemon juice, half and half, on a bit of absorbent cotton, is the best thing in the world wherewith to moisten the lips and tongue of a fever-parched patient.

The finest of manure acids is made by putting a teaspoonful of lemon juice in a cupful of warm water. This removes most stains from the fingers and nails, and loosens the cuticle more satisfactorily than can be done by the use of a sharp instrument.

Lemon juice and salt will remove rust stains from linen without injury to the fabric. Wet the stains with the mixture and put the article in the sun. Two or three applications may be necessary if the stain is of long standing, but the remedy never fails.

## Modest Underwear.

The tendency of modern times is to simplify the underwear without making any radical changes in shape. The first garment worn by a fashionable woman is a vest of ribbed silk or wool or cotton, according to weather, and also somewhat according to the purse and taste. Pure silk is nearly or equally as warm as wool, and is not irritating to a sensitive skin, as wool often is. It has been the fashion for the last quarter of a century to advocate the use of an animal fabric for the garments worn next to the skin. Silk underwear fills this requirement as well as wool, and it has been so much reduced in price of late years that it is no longer an exclusive luxury, but is within the reach of almost every one. In summer stout persons who suffer from heat use shirts of lisle thread. At least three grades of underwear should be used for different seasons—heavy shirts and drawers and stockings of wool or silk for winter, medium weight wool shirts, muslin drawers and cotton stockings for fall and spring, and cotton or lisle thread shirts and stockings and muslin drawers for summer weather. Persons of delicate physique or those who suffer from sudden changes in the weather which are incident to the climate, should wear wool shirts and drawers all the year around if it is not disagreeable to them. No cast iron rule can be laid down in this matter. Any one who needs wool underclothing will not find it uncomfortable. The puritanical doctrine which ignores the feeling and taste in clothing and food is now condemned by common sense and modern medicine. Frequent bathing and frequent changes of the clothing worn directly next the skin helps to keep the skin in a state of health which keeps the body warm. Stout persons generally wear knit underwear, which clings to the figure. Over this the corsets are worn, and over them stout women wear a closely fitting corset cover, dispensing with the chemise. Women of slight physique often use a combination garment in place of a chemise over the corset. This is like a chemise at the top, fitted in at the waist, and ends in a short petticoat trimmed around its bottom. The garment is fitted so as to give as little fullness as possible around the waist and on the hips. It is made of some sheer light cambric or satin cloth, so as to give as little extra bulk to the figure as possible. Only women of very slight build wear the old fashioned chemise. It is then cut so as to leave as little bulk as possible at the waist and hips and is always worn over the corset.

The symptoms of neurasthenia vary greatly in character and in degree, yet they are usually quite easily recognizable as being due to nervous exhaustion and not to actual organic disease of any part of the nervous system. Both neurasthenia and hysteria were formerly, and are by many even yet, regarded as trivial afflictions; and sufferers from them were unjustly looked upon with something akin to contempt as creatures of weak will power, who might be well if they chose. But neurasthenia is a very real disease, and sometimes a terrible one, although the doctors as yet unable to discover any palpable change in the nervous system to account for the symptoms. It seems to be, as its name implies, a real nervous exhaustion; there is no visible change in the nervous system, but it is simply tired from overuse, and unable properly to perform its delicate functions.

The symptoms of neurasthenia vary greatly in character and in degree, yet they are usually quite easily recognizable as being due to nervous exhaustion and not to actual organic disease of any part of the nervous system.

The mind is tired; the patient is unable to concentrate his thoughts on his work, and often finds himself sitting doing nothing while matters requiring his immediate attention are accumulating. He takes no pleasure in either work or recreation, and life has lost its charm. The little sleep he gets is disturbed by dreams, and the morning brings no refreshment.

Various weary sensations, pains, chilly feelings, numbness, and so forth, are complained of in different parts of the body. Dizziness, ringing in the ears, dimness of vision or floating spots before the eyes, headache and pain in the spine are common symptoms. The heart is irritable, very slight causes increasing the rapidity of the pulse.

The neurasthenic is often dyspeptic and usually has a poor appetite.

The treatment is apt to be difficult, for the reason that the patients are hard to manage. The main thing is rest, both mental and physical. Yet the sufferer should not be wholly idle. He should, if possible, leave home for a time and stay in some quiet place where there is enough going on to interest without exciting him.

Long hours of sleep, nourishing food with plenty of cream and butter, moderate daily exercise in the open air, and especially entire freedom from worry are the main points in the treatment of nervous exhaustion.—*Youth's Companion*.

## Don't Eat When Overtired.

There is, perhaps, no more frequent cause of trouble among workers than that of eating when overtired. They return in the evening from their labor exhausted, and flatter themselves that a good meal will set them up again. Their hopes are seldom realized, for their stomachs, like the rest of their bodies, being thoroughly tired, cannot do their work effectively, and the result of giving them a solid meal to tackle is an attack of indigestion. Of course, when one comes in from the day's work, a meal is necessary; but the only thing to guard against is taking it when one is too fatigued to digest it. If, instead of sitting down as soon as possible after entering the house to dinner or supper, the weary worker were first to take a cup of beef tea, or even of weak tea, with a little piece of bread and butter, which would act as a stimulant, she would, by the time she had made her toilet for the evening, be sufficiently rested and refreshed to eat a hearty meal with benefit. And right here comes a word as to the importance of dressing for the evening. It is not merely a habit of refinement, but it helps one to overcome fatigue to get rid of the dust of the day, and to put on fresh, cool garments, instead of those one has worn since morning. The donning of some sort of evening dress—be it only a well worn silk blouse—has a salutary effect on both mind and body, and should by no means be omitted, even by the weary business woman living alone in a boarding house.—*Chicago News*.

## Ten Uses of Lemons.

Lemon juice removes stains from the hands.

A dash of lemon in plain water is an excellent tooth wash. It not only removes tartar, but sweetens the breath.

Two or three slices of lemon in a cup of strong tea will cure a nervous headache.

Lemon juice (outward application) will allay the irritation caused by the bites of gnats and flies.

No family should be without lemons. Their uses are almost too many for enumeration.

A teaspoonful of the juice in a small cup of black coffee will certainly relieve a bilious headache.

Lemon peel (and also orange) should be all saved and dried. They are a capital substitute for binding wood. A handful

will revive a dying fire.

The juice of a lemon, taken in hot water on wakening in the morning, is an excellent liver corrective, and for stout women is better than any anti fat medicine ever invented.

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Lemon juice and salt will remove rust stains from linen without injury to the fabric. Wet the stains with the mixture and put the article in the sun. Two or three applications may be necessary if the stain is of long standing, but the remedy never fails.

Professor Mathieu, of Paris, said that in certain parts of the country both of Germany and France olive oil is used as a family remedy for all stomach pains, and has a high reputation. In his practice at the Hospital Annual Dr. Mathieu has often used this remedy and knows how efficient it is where less simple remedies have failed. He recommends it with confidence, despite the fact that it is a popular hygienic rather than a drug medicine.—Dr. M. L. Holbrook, in *Health Magazine*.

As the gelatin is the nutritive part of the soup, this is important.

Every article of food is distinguished by its individual flavor, and it is said that the individual taste would be quite satisfied if the palate were unscripted by condiments.

The newest chafing dishes have porcelain lining, and it's claimed that much better results are obtained by this substitution for the more familiar metal lining.

Loss trouble than a potted plant, and more certain to withstand the heated gas, is aden air of a city room, is a bunch of English ivy branches in a bowl vase filled with water. A bit of charcoal will keep the water pure, needing only occasional renewals, and the ivy will keep fresh all winter, giving a most acceptable touch of green in the room. Sprinkle similarly treated ivy not only keep their color, but will grow and bloom, to satisfy their purpose perfectly.

Bird clothes fasteners are a necessity with Hale & Liles, which are set to catch cold from their restlessness at night. Clips to hold the coverings over them are now made, and are said to answer their purpose perfectly.

A luncheon sweet, much esteemed by children of almost any family, is fried bread with a sweet sauce. The slices are trimmed free of crust and cut in halves, and dip in a batter made by beating an egg until light and adding to it half a cup of milk. Drop the bread thus moistened into a small quantity of smoking hot olive oil and fry carefully, first on one side and then on the other. Sprinkle lightly with powdered sugar and serve with a jelly sauce or one made from the juice of a can of preserves.

Tarragon vinegar, not only for salads, but for other household requirements, is preferred by most cooks.

The addition to a mayonnaise of three or four drops of garlic extract imparts a flavor not easily described, and which adds much to the delectability of the salad. Some cooks also use what they call a "fleuron of garlic" in the mayonnaise. With this and the garlic an admirable "far away" flavor is given which cannot afford the most delicate taste.

To prepare garlic extract, pierce half a dozen cloves of garlic and cover them with two and one-half ounces of alcohol. This will grow stronger with age.

In a room flooded with sunshine it is wisdom to use wall paper in which green predominates. With so much light, repose and toning are needed.

A good way to make pastry cases in which to serve oyster crabs, desserts, etc., is to use the small earthen bowls that come to bake muffins in; turn these upside down, cover them with pastry, prick with a fork, and bake until a pale brown. Remove from the oven, and when cold take the pastry of the bowl, being careful not to break it; turn them the other way up, fill with all your might to rub your skin off. A coconuts-fibre brush is the best, and to get your back it is a good plan to have a coconuts-fibre mat hung on the wall to rub yourself against. Keep up this friction for at least ten minutes. You could not invent the same amount of time more usefully. There is no such practice for a foolish habit as this, nothing like it to relieve the internal organs from undue heat and congestion of the blood, and to free the lungs from oppression. Moreover, it actually increases the size of the muscles and makes them firmer by causing the blood to circulate more vigorously in them. As to its effects upon the elasticity and beauty of the skin itself, that will be obvious enough at a glance. It is the brush, not the true blood of youth. But the morning bath and rubbing down alone are not sufficient. If during the day you get into a perspiration, do not allow the moisture to dry on the skin. Never come in from a walk or a horseback ride or a row and sit down as you are. Go to your room, take off everything and use the brush. It may seem inconvenient at first, but it is done you will rejoice, and soon it will be some matter of course to you. This fixture after exercise is of great importance, so much so that it may be affirmed that three-fourths of the benefit of any exercise is lost without it. If you forego it, it will be impossible after your exercise to take a rub-down, then it will often be better to choose the rub-down instead of the exercise.—*Unit d States Health Report*.

**Neurasthenia.** Neurasthenia, or "nervous prostration," has been called the "American disease," because we in this country are supposed to be possessed of a restless energy which wears upon the nervous force and finally exhausts it.

Both neurasthenia and hysteria were formerly, and are by many even yet, regarded as trivial afflictions; and sufferers from them were unjustly looked upon with something akin to contempt as creatures of weak will power, who might be well if they chose.

A butter always wears plain clothes. Some people who keep only one man dress him in many. This is obviously incorrect. A butter in the dark dinner suit is not a very dark material, cut in a neck pattern or in the old cutaway style. In this he superintends the serving, or serves himself luncheon or afternoon tea. In this country at a formal luncheon a butler often wears his dress suit, but this is not correct form. In London he wears day clothes invariably until dinner time, when he puts on conventional evening clothes and a white tie.

**The Fashions.**

"\* Venetian cloth in lovely tints of silver blue, opal-gray, fawn, tan, peachy and amethyst shades, is made by Dinet into elegant dress costumes with trimming of fur, passe or guipure yokes, and silk embroidery in applique.

"\* Silk poplin in the bluest shade makes a lovely costume, with a chiffon plaiting of the same color around the feet. A little gold embroidery with lace is the trimming around the decolleté bolero worn over a plaited chiffon blouse.

"\* The seven-colored skirt is still one of the favored models for stout women.

"\* Black cloth coat and skirt gowns, lined with a color which is repeated in the blouse and petticoat, are promised as one of the spring modes.

"\* A frothy jacket of white broadcloth, bordered with narrow folds of black panne attached on, is one of the season's fancies worn with a black panne skirt.

"\* A silk jersey of red broadcloth, trimmings with white lace, and a wide collar of lace.

"\* A white dress of white broadcloth, with a large head of lace and a wide lace collar.

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## POETRY.

"THE CHOUFLY PERSON."

Our pale man, sick weary with his load,  
Had failed and we sought the sturdy stoup,  
Whose hewed length in many a prudent  
loop

The yellow clusters of jasmine glowed  
An ancient inn. It overlooks the rose,  
Along whose banks life sees her scared hosts  
loop;

Her hand by stood—a shunned and sombre  
group—  
The peat house and a prison's grim abode.

None living now may bridge the stream of time;  
And when the other stream of crime and woe,  
Has journeyed past its door with means and  
start,

None is of old, with scared averted eyes,  
Cries at my woe, when crier's angels bid,  
To let life's brief trials with their charity dole,  
Cross the boundary of dreams I stole.

Then wonder grew, as with that wot-cramped  
life

I kept reluctant toward their common goal;  
To mark the lifted face of some sweet soul,  
That sorrow's touch had sealed and glorified.

Not thus, thought I, does hopeless grief draw  
near.

Distant lies—no desperation kiss the steel;  
We see no face, the stile leaves his book,  
Nor the cowled zealot calm fears quietened  
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Cant tell, ye wise! whose labored sermons  
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Life's spirit springs, when come that strange,  
rapt look? **GEORGE O. BUGBEE.**

Brownings Head, Calcutta, '88.

## BY THE WATERS OF GALILEE.

The wind is low in the boughs,  
Silly stirring the rosy sea;

Out from a bill a rill meanders  
Down to the waters of Galilee.

A burning blz n blue enamel  
The talisman heaven that arches o'er;

And D uses draws by the crooking enamel  
Where meadows dip to the blyng shore.

Cramble walls that the hypos cling to,  
Such is Magdal's glory now;

And the sun that the encoo sinks to  
Is that of his mate on the crob bow.

The columned city that Herod fashioned,  
That glistens white in the noonday blaz,

Naught is left of its past imperialism.  
Have ghosts that wander its quaid ways.

Never a sail nor a galley sailing  
The shimmering reach a liquid calm;

Only a watchful vulture soaring  
Over the crest of a lonely palm.

But still the mountains, violet, vernal,  
And the brooding vales where the shepherds  
dare.

And the star, in its equinox eternal,  
Looking down upon Galilee.

And ever to halo the desert places,  
By the spell of the stardins' lone boud.

The haunting thought of the face of faser,  
Of him through whom this is holy ground!

—Dulcina Seolland, in the Century.

## THE TWO BILLYWAKEYEN.

I long have had a quarrel set with Time  
Because he robs me. Every day of life  
Was wrested from me after bitter strife;  
I never yet could see the sun go down  
But I was angry in my heart, nor bear  
The leaves fall in the wind without a tear,  
Over the dying summer. I have known  
No true with Time nor Time's accomplice,  
Daith.

The fair world is the witness of a crime  
Repeated every hour. For life and breath  
Are sweet to all who live, and bitterly  
The voices of these robbers of the health  
Sound in each ear, and still the passer-by,  
—What have we done to them, thou monstro!

Time?

What have we done to Dath that we must die?  
—Whitney Stearns, Binni, in the Oxford Book  
of English Verse.

## WEED FIRES.

Now every little garden holds a haze  
That sets of longer nights and shorter days;  
Handfuls of weeds and cutless garden folk  
Yield up their lives and pass away in smoke.

The leaves of dandelions, dried, notched,  
Burn with the thistle's purple plumes; un-  
watched

Of any eyes that loved them yesterday.  
They light a sudden fire and pass away.

The small fire whimpers softly as they burn.  
They murmur at the hand that will not turn  
Back on the clai and bring to them again

June's turquoise skies and April's diamond rain.  
"Alas!" the weeds are crying as the summer老  
We know what summer is—but, ah! we buy  
Him too dear; we know, because we die!

—Nora Hopper, in the Westminster Gazette.

## PRUDENCE.

Int'l Truth abandoned camp  
Prudence, with immortal tramp,  
Deserves a victory w/ it;

While the Truth, unseen, has passed  
O'er in its desperate fight  
With the cohorts of the Night.

—Harry Lyman Koopman, in Morrow Songs.

O clear eyed Faith and Patience, thou  
So calm and strong!

Lend strength to weakness, teach us how

The sleepless eyes of God look through

This night of wrong.

—Whitier.

Forenoon and afternoon and night! Forenoon,  
And afternoons, and night! Forenoon and—what?

The day that life: like this forenoon sublime,  
This afternoon a paean, this night a prayer,  
And Time is conqueror, and thy crown is won.

Touch me gently, Time!  
We're not proud or soaring wings;  
Our ambition, our content,

Lies in simple things.

Humble voyagers are we,

Our life's dim, unbounded sea,

Seeking only some calm o'mine,

Touch us gently, gentle Time!

—Bryan Waller Proctor.

I hear a song  
Vivid as the day itself; and clear and strong  
As of a lark—young prophet of the noon—  
Ring in a sunlight his seraphic tune.

He prophesies—his heart is full—his lay  
Is of the brightness of the peaceful day!  
May not cloudless, nor devoid of storm,

But sunny for the most, and clear and warm.

Songs of brotherhood, of joy and peace,

Days when jealousies and hate shall cease;

When war shall die, and man's progressive mind

Unfeint, its God designed.

The trees come and go,  
The seasons pass as years.

And His eyes, I behold

Walking in Galilee.

Through the cornfield's waving gold,

In hamlet, in wood, and in wild,

By the shores of the Beautiful Sea.

He touches the sightless eyes;

Before Him the demons flee;

To the dead He sayeth: "Arise!"

To the living: "Follow Me!"

And that voice still sounds on

From the centuries that are gone,

To the centuries that shall be!

—H. W. Longfellow.

Never a day is given

But it comes the after years,

And it carries up to heaven

Its sunshines or its tears;

While the tomorrow stands and waits—

The silent mutes by the outer gate.

## MASSACHUSETTS PLOUGHMAN, SATURDAY, FEBRUARY 2 1901.

## POETRY.

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## Masterful John Masters.

The rice planting aristocracy that dwelt in the quiet little Southern village of Moultrie county taught the very existence of old Jeff Wiggin, and at the Wiggin family was on the road that led to Moultrie, the most populous town of Great Swamp, that sprawled its frame stores, its lumber mill and its turpentine still along the railroad. It Moultrie spoke of old Jeff Wiggin at all, which is doubtful, it called him "that old cracker." Wiggin had come out from Great Swamp, however, and Great Swamp, knowing him intimately, spoke of him more freely and more accurately. They called him "that drunken hog." He was despised by even the guller negroes, with whom he fraternized in the fellowship of fatty corn whiskey. They refused to work his cotton land, to work for which old Jeff cared little, because his wife, his daughter, was with the tip of an ox. To his beat and wrinkle wife with the tip of an ox.

"You quit that cursing," Masters said, grimly, "or you'll be needing a grave yourself."

The negro glanced sheepishly up and pulled off his old hat. "All right, boss," he said grinning cheerfully, "I done forget what I was. Done hit me, boss, 'cause old yore grave got to be ready to do' es right away."

"Finish it, then, but keep your mouth shut," said Master, and the negro dropped back to his work. Masters did not go back to his seat, but stood within the shadow of the oak, directing the grave digging.

By hand, by half a dozen crackster women from Great Swamp, strolled leisurely to the burying ground and waited. They inspected the open grave soberly, and nodded to Masters with a look of feeling surprise, but he spoke to none of them. For some unconscionable reason, he, too, waited, standing by the grave like a soldier on guard.

After a while, a wagon, drawn by an old ox, crept down the road from the direction of Moultrie. It was driven by a negro boy, who kept whistling by a stern self repression, but who could not resist shouting happily at his ox. He was seated on the end of a long pine box that stretched behind him in the wagon. A shrivelled woman, bent and wrinkled, walked feebly behind the wagon as it crawled down the dusty stretch of road. One trembling hand reached out to hold the old woman's hand, but she was too weak to hold it. Her face was the face of one who had walked in the valley of a great shadow; but, too, her face was the face of one who was not afraid.

The wagon came slowly into the burying ground and stopped by the open grave. Then Master's heart swelled with sudden pain, as from his concealment in the shadow of the oak, he gazed full into the face of the girl who stood supporting the old woman by the edge of that muddy hole. In the face of the girl he read clearly a history of the past, and a history of the present, and a history of the future. All his confidence fell from him, and he stood helpless to defend himself to himself as he bowed his head before her. Unconsciously he twisted his strong hands about each other till the joints cracked.

The negro stood by, in the yest' rday's sun, and implored wonderfully in his new life.

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## THE HORSE.

The Flora Temple and Centreville Wagon Race, in 1852.  
BY GEORGE P. FLOYD.

In Dr. Wood's "Reminiscences and Recollections of the American Turf," which he quotes "so copiously" from Hiram Woodruff's old book, he speaks of the race between Flora Temple and the brown gelding Centerville, December, 1852. There were some things connected with that race that Dr. Wood won't find in that book. Flora had beaten Young Dutchman a few weeks before in a race to harness for \$1000. She won the last heat in 2:36.

The knowing ones that had coppered or bet against Flora in that race had dumped their roll. "They had fell heavy," and felt sure "they were the old Tom Hyer gang." They put their heads together, and fixed up a job to catch Hiram Woodruff "napping." One of the gang dropped in on Hiram at his road house on the Flushing road one evening, and affected to be "pretty well set up." He began to berate Flora Temple. Now Hiram was a great lover of Flora, even at that early stage of her career, and he warned in defense of the little mare. After punishing half a dozen bottles of wine—a good portion of which he was sure that Hiram should partake—he went at Hiram flat footed. "Why," said he, "we can beat that little runt of a mare with Centreville for \$500, if you will let me name the rig and day to trot."

"Put up your soap right here," says Hiram, "and we'll make it play or pay, rain or shine." Up went the stakes, \$1000, which was placed in the hands of Sim Hoagland as stake holder. As soon as the money was up the Centreville fellow said, "We'll trot Centreville against Flora, each hitched to a 250-pound wagon, and trot the race tomorrow." Of course Hiram was a little nonplussed, but he was in the trap and had to make the best of it. "All right," says Hiram, "you think you are smart, but you haven't won that money yet, and I'll beat you very hot before you get it."

Now Centreville was known to be a great weight puller. He was a large gelding, about 13 1/2, by Henry Clay. He had won two or three good races to wagon that season. Jack Nodine owned him. They had Centreville in condition and on edge for the race, while Flora had been let up and had been rut-teating at her home at John Perrin's at Jamaica, L. I., for a month, in fact, she had been hardly exercised.

After the sitting at Hiram's, Hiram drove over to Mr. Perrin's home at Jamaica about midnight, and woke up Mr. Perrin and told him what was up. "Why, Hiram, you are crazy," said Perrin. "You know the mare has had no work for a month, and she is soft and not fit for a race. The best thing you can do is to pay for herself." "Pay for herself," said Hiram, "why, the race is pay or play and the money is all up." "Well," said Perrin, "you of course can have the mare, but I am certainly sorry for you." "Well, now," says Hiram, "if they beat the little mare I'll make them think there's a God in Is'r."

Hiram led the little mare home with him. As bad luck would have it, a heavy rain set in, and it continued to pour down all night, making a heavy track and additional advantages to the superior strength of the horse. Hiram worked Flora in the morning. When he came in from her work, he said, "She is mighty and rank, but she will settle down in the race, if the weight don't kill her. In scoring for the first heat, Flora acted very unsteady and slightly, while Centreville was in magnificent condition, as steady as a clock and as square as a brick, as Joel Conklin railed him up and down the stretch before the race."

The odds went up to \$100 against \$200 on the horse. "She's a mighty nice little mare, but she will meet her Waterloo today. She has too much weight behind her. The horse is bound to nail her to the cross," said the backers of Centreville. "Well, you fellows, hasn't got her hanging on that cross yet?" said Hiram. He was as cool as a cucumber.

After scoring six or eight times, with Flora very unsteady, they finally got the word with Centreville two lengths in the lead. Flora made a rush for the horse, but lost her balance on the turn, and broke. She los: 10 to 12 lengths.

"It won't do, the horse will dog her this ear," cried the Centreville gang.

"Not much," said the friends of the little mare, "we can afford to give her a few lengths; wait till she strikes her trot."

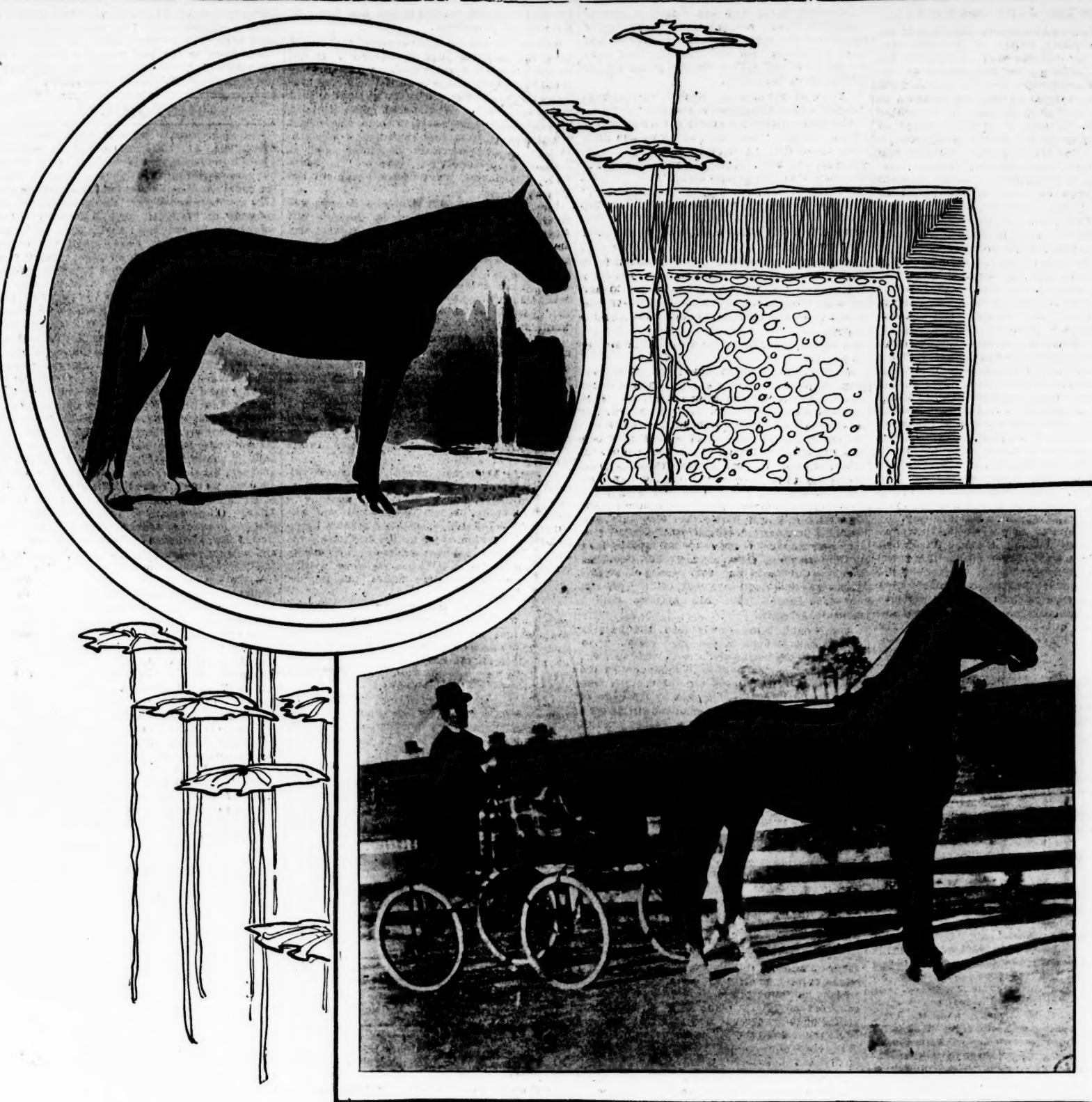
For a caught her trot at the quarter pole and settled. She set sail for the horse, and up the back stretch she exhibited a burst of speed that astonished every one present. Centreville actually seemed to come back to her. She nipped the horse at the half-mile, and it was goodby Centreville and all his friends. Flora beat the horse to a standstill, in fact, Conklin pulled his horse up at the distance. Hiram jogged in in 2:42.

Considering her misfortune in the first quarter, and the ease, pace at which she came home the last quarter, the heats state of the track, and the heavy weight she was pulling, "the wagon 250 pounds and Hiram's weight 105 pounds," the mid-die half of the mile was wonderful, and so considered in those days, 50 years ago.

At the end of the heat the little mare was not in the least distressed, and came out for the second heat as fresh as a daisy, while Centreville gave evidence of distress. His head was down, and so were the heads of his backers. Their faces were as long as the moral law. The odds chopped around to \$100 to \$10 on the mare, and no takers. There is nothing further to say about the race. Flora, having settled to her trot, won the succeeding heats in 2:46, 2:44, and thus disposed of the pretensions of the great wagon horse Centreville, that had been kept dark and on edge for wondrous things, and his sharp and cunning backers had fondly hoped to catch Hiram Woodruff and the friends of Flora Temple and make a great hot killing. But "the best laid plans of m'men and men gang oft agley."

That night when they came to settle up for the race at Hiram's, Hiram, who had tumbled to their racket, told the Centreville gang that when they wanted to put up another job on him to send a man who could drink more champagne than the one they had sent. Says Hiram, "I've got a few more baskets of wine in my cellar that I'll sell at the same price, and I'll help you or any of your agents to drink it. Just you fellows keep up that kind of a game to razzle daze me, and you may get rich at the game. I'll stay with you fellows till the cows come home on all such games."

Hiram drove Flora Temple in most all her races, from the commencement of her career until 1856. The last race he drove the little mare was in a race with Tacony, September, 1856. It was a match race for \$1000 a side. Tacony had beaten Flora three or four races, and Flora had turned the tables on him three or four times. In the race Sep-



TACOMIS, 2:4 1/4

CRAPSHOOTER (p.) Trial to Wagen, 2:16 1/4.

tember, 1856, Flora went to harness, while Tacony was under the saddle, with Warren Peabody on his back. A large amount of money was laid on the race at about even. In scoring for the first heat, Peabody, who knew all of Flora's weak points,—as he had driven her two or three races,—came up ahead of the mare three or four times. Flora would not go off if she could not get a head and head start with her opponents. Peabody's monkey work set Flora crazy. She got loose in her bonnet and commenced to dance a jig. They scored eight or ten times, with the same result.

Peg Pfifer, Crap Collins, Sim Hoagland and myself were standing together when Hiram came up to have the mare spouted to tell the truth he was sometimes a little unprincipled in getting the "dithy lucre."

If Hiram had driven Flora from wire to wire in that heat, Flora would have stopped to watch at 2:20.

## Worcester Notes.

In your story of grand old Daniel Lambert the BANBURY says that this horse was purchased by R. S. Denby, then of Boston, and taken to Saratoga, N. Y. Well, he might have been taken to a great resort, but Mr. Denby sent him to his farm in Rockdale, Mass., which adjoined ours. He was then called Hippomene by the old groan at the farm. My dear little cousin, Jack Brewer, whom my dear mother brought up as her own, and who was all horse, so much so that he would run away from school to see a new born colt, went west to the Deeny Farm, and one evening saw Denby's son Denny, who was in his kitchen, "Please, Mr. Denby, can I see Hip-o'-my-knee's?"

Mr. Denby burst out laughing and said: "My boy, who do you mean by Hip-o'-my-knee's?"

"No, sir," replied Jack, "I mean the new trotter that has just come."

Mr. Denby took little Jack by the hand and they went to the stable where the colt was shown. "Now, my boy," said the man, "this colt's name is Daniel Lambert when anybody asks you. But why are you away from school? My boys are all there."

"Oh," replied Jack, "I just ran away to see that colt, and my aunt will punish me when I get home."

Then Mr. Denby, who was going to Worcester, took Jack along and left him at the farm and asked my mother to forgive him just this once. Said he: "Jack, you won't run away from school, will you?"

"No," replied the lad, "unless you have another new colt."

So my good mother spared the rod if she spoiled the child.

In 1856 my father took a number of colts to the great Boston Horse Show, and among the number was a five year old called Worcester Boy. He was by Massachusetts Morgan, and so much did he look like Ethan Allen that he was taken for him on the track. But when you saw Ethan you saw a pretty fine horse. When the race between Ethan and Hiram Drew came off,

"Dan" was dead wrong. Hiram did just as any sensible man would have done under the circumstances. If Hiram had pulled the mare when she wanted to have her head she was very liable to make a break and get distanced.

Jim McMann was a queer old duck. He didn't look at the matter in the right light. He took the mare away from Hiram after he had made her what she was, and Hiram never sat behind Flora after that race. Jim McMann did love a dollar, and

he was not the last to get into the "dithy lucre." If Hiram had driven Flora from wire to wire in that heat, Flora would have stopped to watch at 2:20.

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